Evaluating mega-urban regeneration projects
Developing a new framework

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EVALUATING MEGA-URBAN REGENERATION PROJECTS: DEVELOPING A NEW FRAMEWORK

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Ethical Approval Certificate

The details provided in the 'Ethics Approval Form' by Reyhaneh Rahimzad was approved by the Research Committee before commencement of the research. The document is attached to this thesis.

This is to certify that the research undertaken and completed by the candidate and reported in this thesis has satisfied the requirements of the University of Coventry and Royal Agricultural University's Ethical Principles and Procedures for Teaching and Research and the Code on Good Research Practice.

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TABLE OF CONTETNTS

PAGE

LIST OF FIGURES

LIST OF TABLES

DEDICATION

This Thesis is dedicated to my beloved family.

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Words cannot express how thankful I am to my parents for all the selfless love and sacrifice they have made on my behalf. Without their immense support and encouragement I would not have not be able to start this Ph.D task.

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ABSTRACT

Mega Urban Regeneration Projects (MURPs) have become key features of regeneration in many cities. Like many large projects, MURPs, because of their complexity and scale, often face the difficulties of being over-budget or late. The overall aim of this research is to develop and validate a new framework to evaluate mega urban regeneration projects. To address this fours objectives are formulated. Firstly, to explore the nexus between MURP, urban transformation and globalisation. Secondly, to identify the characteristics of sustainable mega urban regeneration projects. Thirdly, to investigate existing sustainable urban regeneration frameworks. Fourthly, develop a framework to evaluate Mega Urban Regeneration Projects and finally, validate the framework. The research seeks to apply institutional theory in order to analyse the role of different institutions, their capacity in policy development, implementation and coordination of urban regeneration processes.

The research acknowledges the distinction between inductive and deductive approaches but uses aspects of both approaches in its different phases. Initially, the most appropriate path for this research is a deductive route, top down method; to generate a draft framework to reflect key notions and measurable indicators to assess mega urban regeneration projects. Later, the thesis used the inductive approach during subsequent qualitative probing to investigate the complex institutional, structural and cultural factors at play to gain a more nuanced insight, which takes account of different organisational structures, cultures and institutions and variable local conditions.

The investigation of the proposed project evaluation framework adopted a qualitative approach. This was achieved through a comprehensive review of literature and analysis of a number of MURPs at the international level in order to identify key attributes of such projects. The empirical phase involved face to face interviews with key stakeholders involved with planning, finance, investment, development and implementation of major mega urban regeneration projects and case studies of Kings Cross, Queen Elizabeth Olympic Park and Nine Elms Projects in England and Utrecht Station Area Redevelopment (USARP) project in the Netherlands. The thesis found that MURPs are, by definition, expensive, complex and have multiple – often competing – goals, which

complicates their assessment. Even though the draft MURP evaluation framework is balanced and multi-faceted with procedural and teleological aspects, it offers no definitive blueprint. Even the proposed MURP assessment tool considers sustainability; it is not a "silver bullet" but part of a multi-criteria, iterative participatory and evolving evaluation process which needs to engage with all stakeholders. MURP's transformative aspirations must be tempered by consideration of the urban and site context within a specific cultural and legal and planning regime. Infrastructure investments or entrepreneurial interventions need to be commercially viable, enhance the public realm or otherwise demonstrate strong social benefits. Nevertheless, despite its limitations the MURP framework provides a useful supplement to standard planning or commercial project evaluations. It presents an objective, scientific way of approaching contentious issues. Without the framework, misguided projects can start, or good ones stall, due to wrangling between rival stakeholders. This study makes original contribution to knowledge in the form of theoretical, policy, methodological and practical contribution in understanding Mega Urban Regeneration Projects (MURPs).

1| Introduction

1.1 Contextual background

In the coming decades cities confront substantial growth with internal and external challenges (Huston et al., 2015). Disastrous incidents like war, tsunamis or volcanic eruptions are dramatic examples of external threats. One response is to build new garden or other cities. Alongside external distress, cities change endogenously. Poor management and diminished infrastructure can leave an unstructured sprawl and also pollution. Unstructured urbanization results in poor health, air pollution, traffic congestion and crime. The failure to tackle spatial and market externals is not sustainable.

Additionally, today rapid urbanization of the 21st century, resulted in regeneration and expansion of cities. The UN estimates that by 2030, the world will have 41 mega-cities (cities with 10 million inhabitants or more), and above half of the world's population will be urbanised. It is worth noting that this population rush has been one of the responses to the opportunities that cities offer - such as the opportunities that were created by the wealth and economic developments. The phenomenon of 'megacities' has been created by this rush to the cities which has affected the cities more than ten times the size of the largest cities of the past, and has brought problems and challenges alongside the potential they offer. The advocates of new urban policy seek to address these issues via Mega Urban Regeneration Project s (MURPs) and similar emblematic developments (Swyngedouw, 1997).

Although there is no universal or standard definition for the term "Mega Urban Regeneration Projects"; the term reflects large scale urban regeneration projects which cost over 1 billion US Dollars (Flyvbjerg and Cowi, 2004) and are financed and initiated mainly through public-private partnerships (Flyvbjerg, Bruzelius and Rothengatter, 2003). According to Tallon (2010) MURPs have substantial impacts on economy, society and the environment of a locality and aim to be used as a planning tool and a magnet for attracting inward investment (Fainstein, 2008). These Mega Projects aims to sustain regional competitiveness and economic prosperity by fostering the well-being of a city (Croucha, 1999) and have public attention and political interest because of their impact on the community, environment, and state budgets

(Leherer and Laidley, 2008).

Whist many cities have always been trading hubs, links between urban centres and the global financial system have been strengthened by global trade and are rapidly assuming a key position in financial changes. The extension of trade, capital flow and a wave of new technologies are among the critical components in the evolution of the new global system. Indeed, economic development and improvement among nations throughout the world are highly dependent on the globalist transformation that is taking place within their own urban communities.

Olds (1995) considers MURPs as part of the wider trend towards globalisation. It is notable that globalisation itself was driven by Foreign Direct Investment (FDI) and by Multi-National Corporations (MNCs) as they sought to treat the whole world as a single complex marketplace. MURPs became an important part of the changes this process brought about, as urban policy by national and local governments sought to use such mega projects as a tool for regenerating their cities. Sometimes known as Flagship Projects, MURPs these played a part in urban transformation whose other strands included urban branding, city imaging and city marketing (Smyth, 2005).

MURPs require a long development cycle and are prone to risks such as cost over-run, due to their complex nature and scale. The associated costs of such projects make them particularly risky - hence they can be difficult to finance. As Flyvbjerg (2003) and Altshuler and Luberoff (2003) indicate, mega projects are often notorious for failing to keep within budget and time schedules. Almost nine out ten Megaprojects face cost escalations with an increase of 28% on average (Flyvbjerg, 2003). The risks associated with implementation of such projects also include the potential bankruptcy of different partners, especially private firms, political instability in less stable countries and financial crisis at global and national levels (Bruijn & Leijten, 2007). Metropolitan cities such as London have attracted a great deal of both speculative and more-informed inward investment to finance their intensification. Sustainable MURPs can ‘redress regional economic imbalance’, and ‘their remit extends beyond technical considerations of time, cost and delivery’ (Atkinson, 1999). Nevertheless, the very complexity of MURPs means that they often run over time or over budget, and almost by definition they are concentrated spatially on

a particular urban district, which often tends to be in a capital city.

1.2 Research Rationale

In the coming decades, the world's population will be increasingly urban (Floater et al., 2014) yet planning regimes in many civic areas seem incompetent to address emerging internal and external challenges (Bordieu, 1998). The purpose of this research is to articulate and substantiate an ex anti-evaluation framework which identifies 'institution', 'project' and 'funding' components (Huston et al., 2015). A sustainable MURP approach calls for inspirational, yet grounded and affordable, transformation projects with community spatial spinoffs in health, conviviality and social justice. However, multiple and lofty Sustainable Mega Urban Regeneration Projects aspiration can also load development costs onto projects in disadvantaged locales and this may erode feasibility (Huston et al., 2015). Commercial counterweights can include land-gifting, tax breaks or project de-risking (involving, for example, corporate governance, structured community dialogue and a robust payback model). Tax increment financing or social infrastructure bonds may provide alternate funding solutions but this requires further evaluation.

This thesis provides a review and assessment of three existing MURPs in London, utilising a deductive approach based on qualitative data collection. The theoretical element contextualizes the formative structure and governance models of Mega Projects within an urban regeneration context. The empirical component of the study employs case studies and face-to-face semi-structured interviews with key players and stakeholders in financing, policymaking and implementation of urban regeneration projects in the UK and the Netherlands. The empirical component comprises a qualitative approach, which concentrates on the evaluation of MURPs in the UK.

Drawing upon evidence from case studies in the UK and the Netherlands as part of a larger study, this research first develops a MURP evaluation framework and then uses it to critically evaluate a number of MURPs. The proposed framework for a Sustainable-MURP involves 'smart institutional', 'quality project' and 'innovative funding' components. The research methodology combines qualitative research with a comprehensive literature review.

This research seeks to fill a gap in the knowledge by proposing an evaluation framework to help face the current and emerging challenges that face MURPs. Central areas and the peripheries of many cities have experienced striking and dramatic changes in recent years, through the creation of the new urban spaces named Mega Urban Regeneration Development. In city centres, high profile 'flagship' developments have emerged, often based on culture and consumption; themed enclaves have also been developed; and repopulation of central areas has led to zones of gentrification (Tallon, 2010). In peripheral urban fringe 'edge city' areas, developments have included campus-style office parks, multi-retail and leisure developments and warehouse and distribution complexes. These spaces have a distinct morphology of self-contained cells.

The research contributes to the ongoing academic urban development discourse and provides practical pointers to policy makers, planners, investors, developers and other stakeholders involved with Mega Urban Regeneration or other development projects. The study provides a roadmap to reinforce positive policy pathways and avoid potential mistakes.

Aim

The aim of this research is to develop and validate a new evaluation framework to evaluate mega urban regeneration projects.

Objectives

1. To explore the nexus between MURP, urban transformation and globalisation
2. To identify the characteristics of sustainable mega urban regeneration projects
3. To investigate existing sustainable urban regeneration frameworks
4. Develop a framework to evaluate Mega Urban Regeneration Projects
5. Validate the framework

The research contribution was to identify the likely constituents of a more nuanced working model suitable for encouraging investment into these schemes. This refined framework is proposed to assist decision-makers and executives, enabling them to evaluate better the large, potentially problematic, regeneration projects.

1.3 Contribution to Knowledge

Ph.D research is about the articulation and investigation of phenomena investigated and observed across an array of methods (Petre, 2010). Vandell and Lane's ground-breaking work in this area (1989) has remained paramount for the past quarter century. The present research aims to fill a gap in the knowledge by significantly building on previous related studies. This contribution is articulated in four ways: theoretical implications, policy implications, methodological implications, and practical implications.

Theoretical contribution

The research contributes to the academic urban development discourse and provides practical pointers to policy makers, planners, investors, developers and other stakeholders involved with Mega Urban Regeneration or development projects.

Policy contribution

These findings may help policy makers develop strategies and plans for sustainable mega-urban regeneration strategies. Therefore, assessing how organisers can enhance the sustainable development principles in mega-urban regeneration is one of the main contributions of this research to existing knowledge.

Methodological contribution

This research adopts a mixed methodology and triangulates the variations in the built environment, social structure and stakeholder organisational structure and the financing of mega urban regeneration projects. It uses NVIVO software which offers a unique approach in urban regeneration research.

Practical contribution

The study provides a roadmap to reinforce positive policy pathways and eschew mistakes. It also aims to go beyond policy issues, and to look at the inter-relation between the three London-based MURPS, both in terms of what motivated them and also how they are implemented. This research makes a

novel contribution to knowledge, assessing the sustainability of urban regeneration polices and implementation models in the UK.

The research seeks to apply institutional theory in order to analyse the role of different institutions, their capacity in policy development, implementation and coordination of urban regeneration processes. Therefore, undertaking this research will fill the gaps identified in the literature and also benefit practitioners and other stakeholders in the following areas;

• The proposed MURP evaluation framework may help as a guide for future regeneration planners responsible for the evaluation and delivery of MURPs. The MURP evaluation framework can help both to minimise risk and to identify specific factors that can help achieve sustainable regeneration.

• This study is also intended to serve as a potential basis for future research, by helping refine academic understanding of the evaluation and delivery of MURPs. It may help support formal courses in the built environment to provide a better understanding of the emergent field of sustainable regeneration projects.

1.4 Ethical Considerations

Several ethical issues are addressed during the course of the research, since it includes both interviews and case studies. The researcher has accordingly worked through the Royal Agricultural University and Coventry University Code of Research Ethics.

The interviews were all held face-to-face, in the working environment of the participants, who were all key stakeholders in a particular MURP. Each participant signed a consent form, informing them of the nature of the research and explaining how their data gathered from them would be processed. Each participant was then given the choice as to how much of their personal information and their input could be used by the researcher, including assigning copyright of the taped recording. This allowed the participants to decide whether to take part in the study before the interview began.

The recordings were stored digitally and locked with a secure password until the completion of the research. No identifiable responses will be passed to a third party, and only the author of this paper has access to the data the

participants provided. The findings will be made available through one or more of the usual academic platforms: peer-reviewed academic journals; national or international conferences and local seminars. Also the findings will be shared the key participants who took part in the research, enabling them to benefit directly from the work.

1.5 Overview of Research Methodology and Thesis Structure

This research is focused on urban regeneration study. This method of study is often conducted through the collection of many stakeholders' experiences. In this study, stakeholders will be built environment professionals acting as investors, developers, consultants, financiers, developers, public planning officials and others involved in the development of megaprojects.

This research embraces constructivism as an ontological position and interpretation as an epistemological position within an overall qualitative research philosophy.

Data collection takes either a quantitative approach, or a qualitative approach, or a mixture of the two (Sandelowski, 2000). The first approach typically generates a great deal of statistical information which can then be objectively analysed; the second approach can offer a richer and more complex understanding of a case study, but it is necessarily more subjective, being marked by individual insights, attitudes and opinions. Bryman, Bresnen, Beardsworth, & Keil, 1988). David & Sutton (2004) outline some of the thematic polarities between the two approaches, seeing them as numbers versus meanings, deductive versus inductive, objective versus phenomenological, and generality versus a richer understanding. Research that mixes the two approaches aims to achieve the best of both worlds. The five most common research designs are experiment, survey, archival analysis, history and case study.

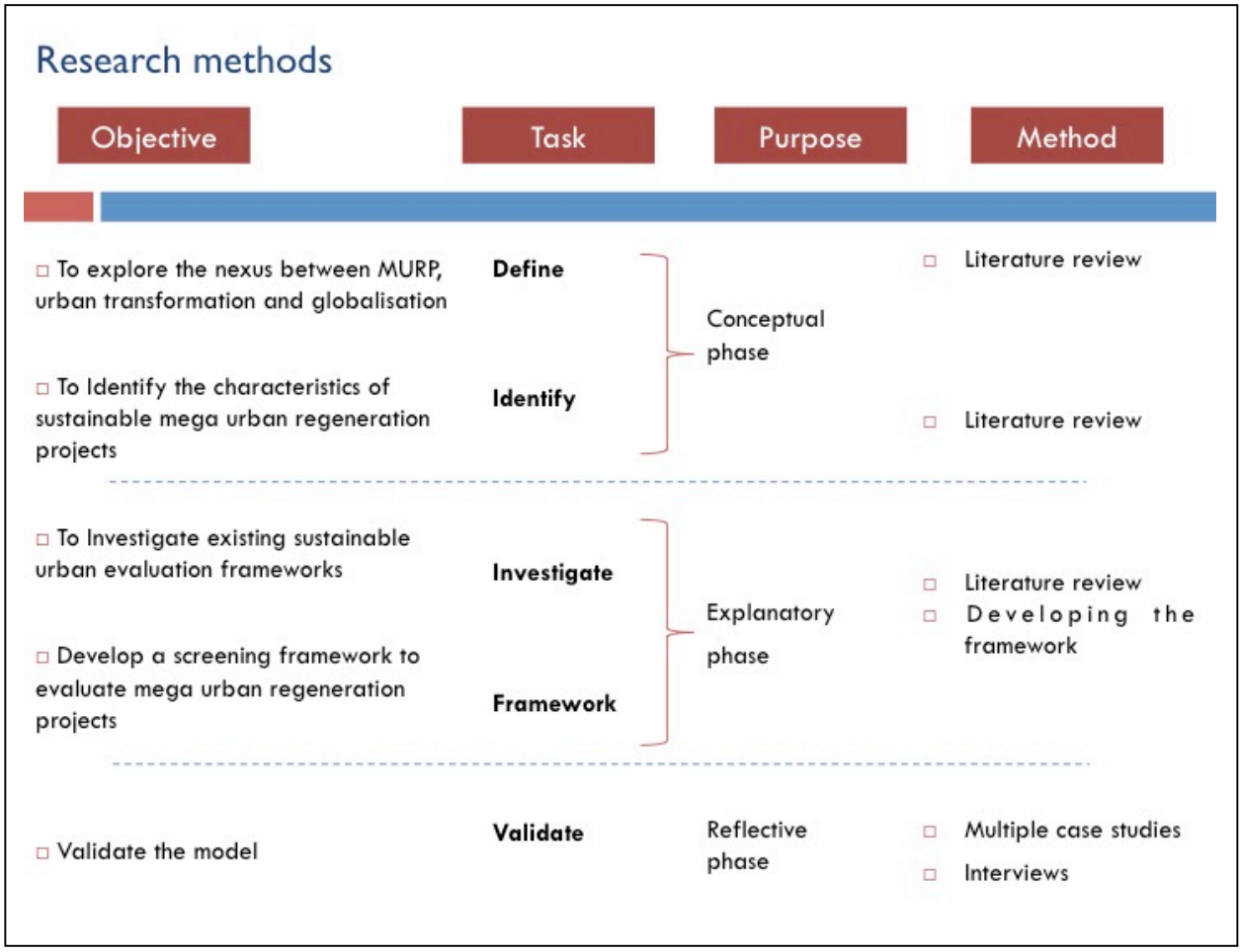

Figure 1.1: Illustration of Research methods (author, 2017)

Figure 1.1 presents the overall structure of the research methods used for this study. The thesis is comprised of nine chapters relating to the research aim and objectives. The chapters consist of the introduction, literature review, methodology, model, location criteria, case studies, analysis and conclusions (Figure 1.2). A brief overview of each chapter is discussed below.

Chapter One identifies the research problem, the overview of research methodology and thesis structure and outlines the approach to answer the research questions. **Chapter Two** investigates the background that underpins urban transformation and shapes the creation of MURPs (Objective One).

Chapter Three investigates existing MURPs evaluation frameworks and is particularly concerned with the factors that influence their successes and failures (Objectives Two and Three).

Chapter Four establishes the theoretical paradigms of the study, which utilize a qualitative approach through the lens of institutional theory that focuses on the evaluation of MURPs.

Chapter Five uses the findings from the literature perspective and with pilot studies from the USA and Europe, to generate an evaluation model for mega-urban regeneration projects (Objective Four).

Chapter Six outlines the characteristics of Greater London as the location area.

Chapter Seven applies the proposed framework to the three case studies chosen for this study (Objective Five).

Chapter Eight supplements this with evidence from the 32 interviews conducted during the research, thus providing the third component of the triangulation strategy used to validate the model.

Chapter Nine introduces the existing discourse about urban regeneration policies and practices in UK; it highlights the major findings and vital conclusions and reflects on the contribution to knowledge noted in this thesis. It also considers potential areas for future research.

The research questions that addressed are as follows:

1. What are MURPs and why are they important?
2. Can we define the success or failure of a MURP?
3. Who are the MURP stakeholders and what are their expectations?
4. Can we devise a more robust framework to evaluate MURPs?
5. What are the financial and institutional implications?

To achieve the kind of in-depth analysis needed to answer these critical issues, this research takes a qualitative approach, via a series of face-to-face interviews with policy makers, planners, investors, developers and other key stakeholders involved with Mega Urban Regeneration or development projects. This allows current international trends in urban regeneration policy and practice to be put into context. For example, the UK's standpoint on urban regeneration in recent years has been to promote partnerships which characterise both governance structure and also funding models for MURPs in the UK. Evidence from Utrecht, for example, helps place the UK experience in a wider context. The empirical research employs case studies of selected MURPs, alongside data analysis and a semi-structured questionnaire aimed at key stakeholders, involved in the execution of urban regeneration projects in UK. Figure 1.2 outlines the overall methodology and structure of the research.

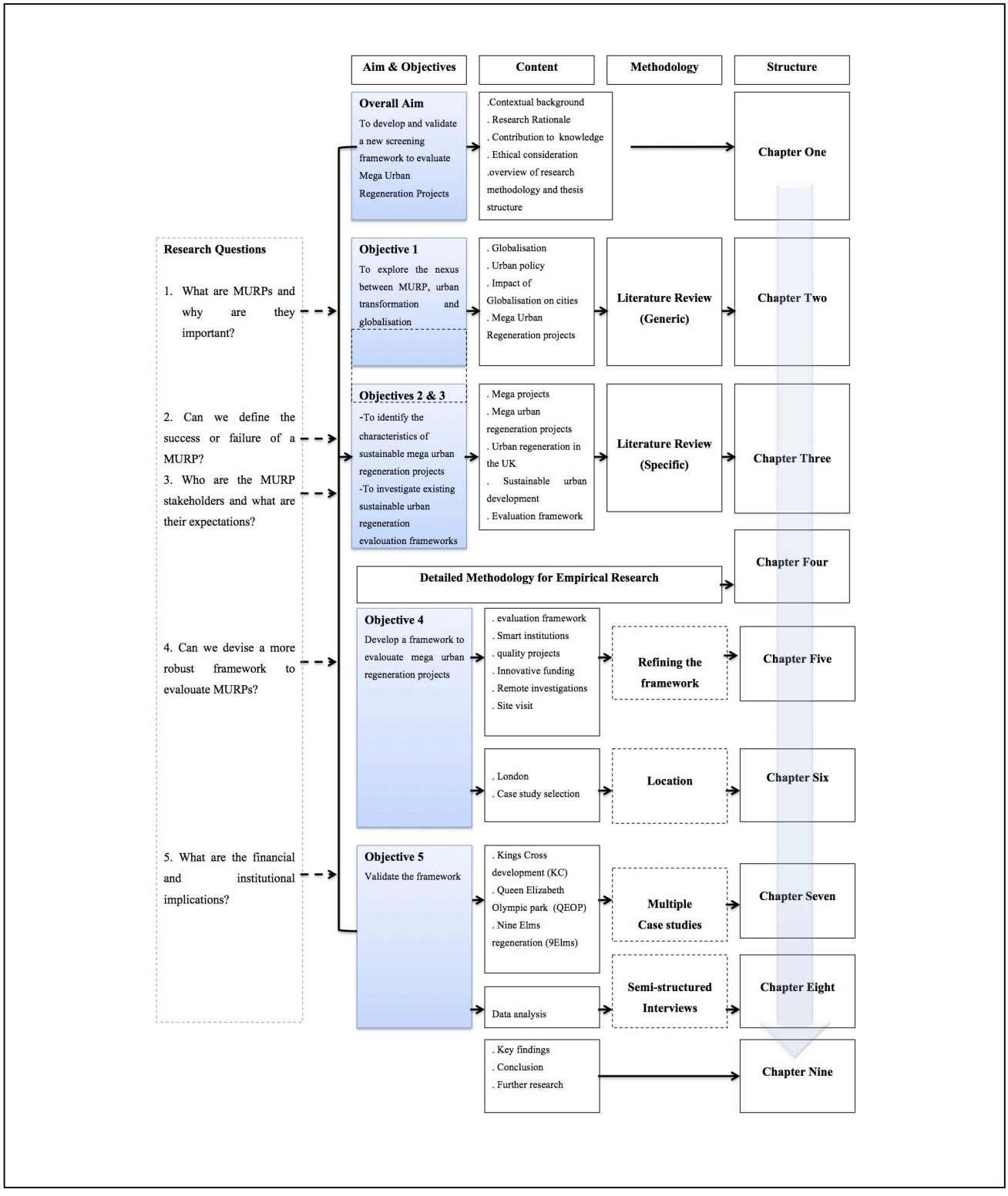

Figure1.2: Outline of the Overall Methodology and Structure of the Research

2| Literature review: Globalisation And Urban Regeneration

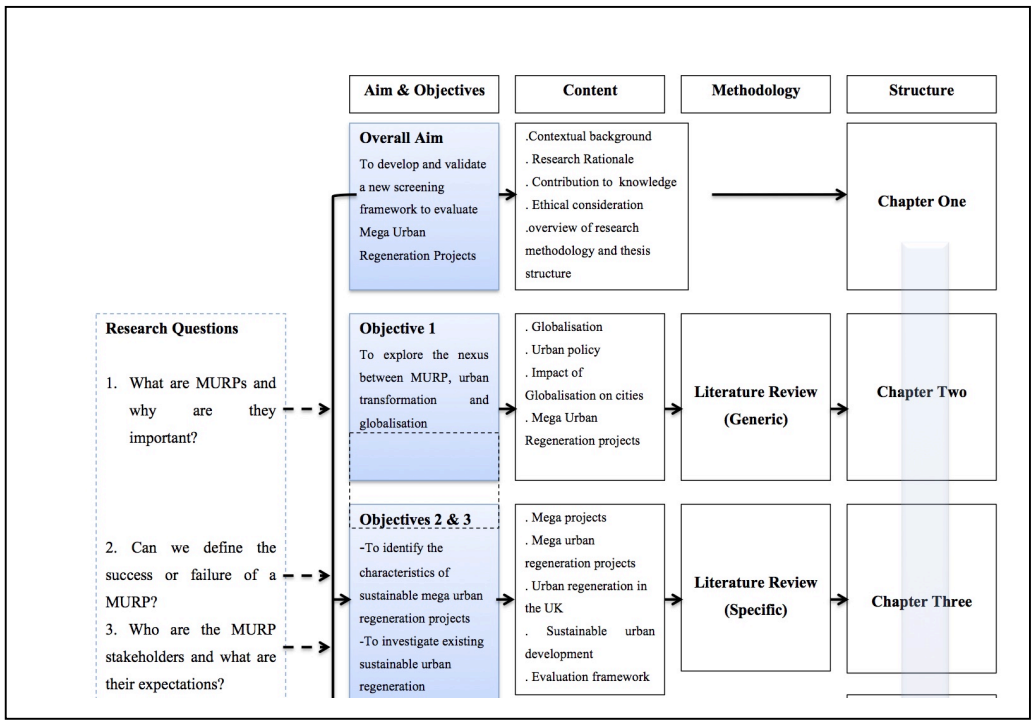

Figure 2.1: Thesis Structure (Corresponding objective, methodology and chapter structure)

Chapter 2: Globalisation and Urban Regeneration

2.1 Introduction

Although urban regeneration is widely practised, our understanding of the phenomenon remains limited. This is primarily due to the fact that there is no single approved form of urban regeneration practice and no single authoritative source of information (Roberts, Sykes and Granger, 2016).

The first chapter identified some of the controversies surrounding mega-urban regeneration and outlined a pathway for investigating it. The task here for the second and third chapter is to review the literature associated with mega-urban regeneration, with a view to generating a draft framework for systematic analysis.

Many cities around the world are expanding rapidly due to both population growth and migration, yet infrastructure investment lags far behind (Duflo, 2012). The result is often serious environmental problems, dysfunctional housing markets and an increase in social problems (Wilkinson & Pickett, 2009). The question is why more equal societies almost always do better (Lane, 2009). Some advocate allowing market forces to solve these problems via MURPs and real estate development, while others (see for example Lees, 2008) are strongly critical of this approach, arguing that the prospect of such megacities jockeying for position in a competitive marketplace does not seem likely to offer a platform for sustainable international development. Certainly there can be no doubt that the global economic system has a profound effect in terms of how economic forces feed through into the development process, into social and political effects and into planning policy.

This chapter consists of a generic literature review which specifically addresses research question 1: What are Mega Urban Regeneration Projects and why are they important? (Figure 2.1). Section 2.2 provides a brief background to Globalisation before discussing the fundamental aspects of the global economy found in the literature. Section 2.3 focuses on urban development and how this affects globalisation. Section 2.4 reviews the impact of globalisation on cities. Section 2.5 introduce the MURPs as one offshoot of these global cities; this

concept will be explained extensively in the literature discussion in Chapter Three. Section 2.6 provide a brief background to Megaprojects before conferring the Mega Urban Regeneration Projects comprehensively outlined in Chapter Three.

Overall, the thesis aims to present a synthesis of the relevant literature in terms of both how MURPs feed into urban transformation and the factors that influence their construction.

The purpose of Chapters Two and Three is to present a broad review of the relevant literature relating to MURPs. The literature items reviewed were selected from a much wider range such as urban development and construction management, as those only directly relevant to the focus of this research would provide a wider perspective on the complexity of Mega Urban Regeneration.

The key inspiration behind this chapter is to build up a draft framework to comprehend the relations between rapid changes in urban improvement, transformation and the role of globalisation. This chapter has three tasks to address objective one:

1. To review the key concepts of globalisation and its inter-relation with urban transformation
2. To explore how globalisation has altered urban sites and the emerging patterns of urban regeneration
3. To investigate how globalisation has been successful in the courses in which new urban approaches are delineated. It will also explain the route in which some neighbourhoods have embraced changes brought on by globalisation in the light of a "New Urban Policy".

2.2 What is Globalisation?

Tallon (2010) specifically identifies economic globalisation as the main factor currently influencing urban competition and suggests that understanding its impact is key to understanding urban regeneration. Olds (1995) outlined some of the difficulties of achieving this, describing globalisation as contingent and dialectical, lacking in uniformity – an “undulating mesh of processes” – which gives rise to a complex network of varying local interpretations and

transformations. Theories of globalisation have been used to analyse a number of processes. King (1991) references the writing of McGrew, Giddens, Harvey, Rosenau and others, referring particularly to the variety of inter-connections that surpass the nation-state (the geographically defined societies which make up the inter-state system). Resulting from the development of global networks of communication and knowledge, alongside global systems of production and exchange, local circumstances seem to be losing their grip on people's lives. King (1991) notes that globalisation represents the intensification of global connectedness, the constituting of the world as a single place. Moreover, Cohen (2001) shows how the process of globalisation can lead to increases in urban income and productivity.

Held (1991) notes that globalisation works in two directions: on the one hand, there is the expansion of political, social and economic activity, so that societies take on a global scope, and at the same time there is an increasing interconnectedness between those societies, creating a sense of a single global community.

Tallon (2013) indicates cities to build up their competitive advantage are engaged in competition with other places which has consequently become the new conventional wisdom about the cities.

Olds (1995) discusses the impact of globalisation on urban space in terms of five key measurements of contemporary globalisation, as illustrated in Table 2.1.

Table 2.1: Globalisation and the Generation of Urban Space (Source; Olds, 1995)

The extension of trade, capital flows and a wave of new technologies can be acknowledged as critical components in the evolution of the global system (Parsa, McGreal , & Keivani, 2001). It appears that urban areas are becoming new sites for global assembling creation and progressively assume a key part in financial changes. In summary, economic development and improvement

among nations throughout the world are highly influenced by the global exercises that are held inside their urban settings.

Recently, different ideas identified with globalisation have become mutual in the study of economic change and changes in urban conversion. Advances in innovation and cutting edge broadcast communications have improved awareness and ideas-exchange among populaces, social developments, multinational firms and governments. The following sections of this chapter will discuss the nature and the impact of these changes on urban regeneration and cities in general.

Schurman in his book Globalisation and Development Studies: Challenges for the 21st Century (2001) notes that liberalization of the world economy and the fading of the nation-state that are consequences of globalisation, have a significant impact on the functioning and structure of cities.

Kantor (1987) claimed that with regard to the cities' significance, the excellence of their urban quality is more important than their geographical location. Therefore in this context the main task of urban regulators and authorities involve attracting investment and improving or safeguarding the economic prospects of cities. This can be done by creating attractive urban conditions that create a platform for potential investors and corporations (Beriatos and Gospodini, 2004).

By contrast, there are anti-globalisation perspectives, among which perhaps the most direct challenge is the 'court sociology' of Beck and Giddens (1994) who conceptualise globalisation as primarily an abstract cultural process, demanding "inevitable" changes of the dominated (Beck, Giddens and Lash, 1994). One theme raised by this analysis is of the polarity between corporate power and economic democracy (Allen, 2002). The concentration of capital has led to an extraordinary growth in inequality. Allen (2002) notes another feature of the movement - namely commodification versus public services. The GATS round of negotiations at the World Trade Organisation aims at the progressive liberalisation of 160 service sectors by committing governments to removing unnecessary barriers, in order to compete with multi-national service providers (Coatesa & Ludemab, 2001). Another critique proposed by Allen (2002) is that of financial freedom versus regulation. The concept of globalisation as a

liberating force depends on an idealised view of the world of finance. This is countered by anti-globalisation critics who seek to subject the financial sector to greater state control, through measures such as the Tobin tax (designed to prevent short term speculative currency transactions) (Giddens, 1999).

Harvey (2010), who has written extensively and influentially about the production of space under capitalism and, in particular, on uneven geographical development, supports this critical view. Harvey (2010 and 2000), on his theory places emphasis upon certain aspects of the internal relationship between capital accumulation and uneven geographical development (Das, 2017). Further, Harvey (2010) claims that what we now call 'globalisation' has been in the sights of the capitalist class all along.

2.2.1 Fundamental aspects of the global economy

The world economy is defined by a linked set of markets and production units, organised and controlled by trans-national capital, and economic integration movements have intensified this global system (Friedmann and Wolff, 1982). In such a system, there is a need for "nodal points", namely the so-called world cities, to co-ordinate and control global economic activity. The practice of co-ordination and control is the production and reproduction of the organisation and management of the global production system. In such a system, capital is highly mobilised, while this is not the case for labour.

Broadly speaking, the constant strengthening of multi-national economic blocks with advanced technologies enables rapid information exchange. Together with liberalisation of trade and capital flows, these are the basic factors reshaping the key elements of the world economy (Gordon, 1999).

The outcomes of these processes - key trends within the world economy - include the growth of the international financial markets; the expansion of the international trade in services and the re-patterning of foreign direct investment (Sassen, 2011).

The complexity of urban regeneration issues throughout the globalisation demonstrates that a combination of bureaucracy and market powers control the form of the emergent urban development.

In summary, the contemporary globalised economy is based on lasting innovation, growing flows of goods and financial markets. Some world cities, like London, offer an urban fabric perfect for globalisation's essentials, and their built environment and resources allow them to attract international investment. In this globalised tournament, new large Mega Urban Regeneration projects like Canary Wharf or the Queen Elizabeth Olympic Park in London are being born which aim to be used as a planning tool and a magnet for attracting inward investment (Fainstein, 2008).

The following section displays some comprehension of how the urban revolution has occurred in cities through the viewpoint of economic globalisation.

2.3 Changing Urban Policy - Neoliberal Urbanization

At local, regional and national level, governments were responding to the requirements (real or imagined) of a deregulated international economic system by vigorously pursuing a neo-liberal agenda (Swyngedouw, Moulaert, & Rodriguez, 2002). Urban governance is identified as an effective co-operative planning, decision-making process and implementation to co-ordinate unique strengths of local government (Pieterse, 2000).

Table 2.2 summarises the development of urban regeneration since the end of the Second World War. During this period urban politics have transferred from the local provision of welfare and services to openness and an increase in international trade policies in order to foster local growth and economic development. In this new era, with all its promises of potential prosperity, cities themselves became the most important arenas where all these political and socio-economic changes were taking place. Urban policy was focussed on transforming and regenerating the world's great cities. At the same time, such policy was being developed in tandem with market-driven neo-liberalism, a trend which down-played distributive welfare considerations, and relied instead

on the market to promote economic growth and to encourage competitive restructuring (Swyngedouw, Moulaert, & Rodriguez, 2002).

Table 2.2: The evolution of urban regeneration (Source: Roberts, 2000)

The relationship between New Economic Policy, New Urban Policy and Urban Development Projects according to (Swyngedouw et al, 2002) is summarized in Figure (2.2). Swyngedouw et al (2002) propose the notion of a New Urban Economy, in which state intervention is redirected away from market regulation and towards supporting social and physical infrastructures and superstructures. Examples of this reorientation include state support for MURPs, which encourage the increased circulation of capital in a context of market forces that operate with few restrictions.

Figure 2.2: Relationship between New Economic Policy, New Urban Policy and Urban Development Projects (Swyngedouw. et al, 2002)

Peck & Tickell (2002) further elucidate this new economic policy. They show how state governments are moving away from blanket distribution of funds and are, instead, preferring spatially targeted social policies which indirectly encourage entrepreneurship, by streamlining cumbersome bureaucracy and encouraging investment "partnerships".

The Labour government that came to power in the UK in 1997, led by Tony Blair, sought to offer a new urban policy agenda, midway between the policies of the New Right (the Thatcherite focus on privatisation and deregulation) and the Old Left (the Keynesian interventionist policies of previous Labour governments). Blair called this the "Third Way", arguing that the dramatic transformations resulting from globalisation meant that traditional ways of looking at urban policy were no longer viable. (Biddulph, 2011; Tiesdell & Allmendinger, 2001). In the context of urban regeneration, this Third Way was characterised by a promotion of partnerships that combined public and private sectors (Giddens, 2013).

New urban policy (NUP) is concerned with how globalisation and liberalisation link with new forms of governance. Swyngedouw et al. (2002) deliberate vast number of Mega Development Project and came to the view that Mega Development Projects are gradually used as an instrument for establishing measures in planning and policy procedures. Their research showed how Mega Development Projects and real estate markets accentuate polarisation and re-divert budget priorities towards investment-oriented objectives and re-arrangement of the labour market.

Van den Berg & Braun (1999) assumed that urban branding is a response to increased urban competition and argued that urban branding tends to lead local government towards a more entrepreneurial and market-oriented management strategy. City branding as part of urban policy is a resolution to enhance economic development and enrich local population identity for their own city.

Worthington (1998, cited in Riza et al., 2011) notes that city branding is increasingly important as a way of differentiating between global cities in an increasingly homogenous world. As cities seem to be moving closer together culturally and economically, it becomes increasingly important to focus on what makes them special: their local cultures and traditions, their styles of architecture, their diversities of community. Kavaratzis and Ashworth (2005, cited in Ashworth & Kavaratzis, 2009) identify the three main methods of city branding as personality branding, flagship construction and event branding. In the first, the city associates itself with named individuals: such as the Beatles in Liverpool's case. The second can involve MURPs, or distinctive buildings or districts which create a signature urban style: for example – the Museum of Islamic Art in Doha, or Offenbacher Hafen in Frankfurt. Events branding ranges from local food or arts festivals right up to major international events like the Olympics or the World Cup.

Large-scale urban regeneration projects such as Canary Wharf in London, the Salford quays regeneration or the Liverpool waterfront development are all examples of flagship projects, which are aimed at strengthening city branding.

2.4 Globalisation and its impact on cities

The outcome of changed attitudes towards industrialisation, a diffusion of global capitalism and an introduction of new urban politics is known as the 'Global City' in literature. Global cities are those in which a vast part of the world's most important business is conducted (Gedikli 2002).

Cities face intense competition in international financial services to ensure capturing global attention. Since the way a city is noticed depends on providing outstanding commercial services, image creation and the strength to attract international investment activity (Zikin, 1992).

The spirit of entrepreneurialism is associated with competition. Since capital is geographically flexible, localities try to attract it, and enter into a course of inter-urban competition. They compete for mobile investment (in any wealth-creating or employment-creating sector; including commercial development, property, information sectors); for economic growth (represented by income, human capital, political power and demand); public funds (at a national or international level); and for hallmark events and the major infrastructure that accompanies it (such as Olympic Games to contribute to urban place marketing).

Accordingly, Begg (1999) claims in order to improve and secure the future growth in cities at a global level, they have to increase their competitive aptitudes. It seems that the global economy removes the concept of borders between countries whilst cities have consequently lost their power in controlling their internal economy as well as shaping their interaction methods with the external network (Gospodini, 2002).

Goverments are now trying to offer more inducements to capital to secure development and growth. Boyle & Rogerson (2001) show urban governance has increasingly become the creation of urban attractiveness. They believe this involves either adjustments to a city's image through influence of soft infrastructure like cultural and leisure amenities or the re-fashioning of a city's economic attractiveness through establishment of grants, property, transport facilities or tax cuts (Paddison, 2001).

Sassen (2011) argues that globalisation has had a significant impact on the socio-spatial recognition of cities and regions. She identifies these impacts in two main ways: the geographical dispersal and fragmentation of production systems, disaggregation and spatial division of labour, along with rigid corporate control and centralisation of corporate power; and secondly, increased migration flows at regional, national and international levels.

Zukin (1992) shows how increased competition for international financial services has encouraged cities to clean up their old diversified urban centres and replace them with upmarket offices and commercial centres. This, however, makes them more expensive places in which to live or work. Furthermore, Zukin notes that this has led governments to focus their spending on supporting private development rather than on public services.

Sassen (2000) shows how London's dominant position in a series of networks enables it to centralise small portions of capital from a very large number of financial markets from all over the world, building on its experience as the administrative hub of the former British Empire. Informed by Globalisation and World Cities (GaWC) research, the development of London has been supported by government policy to open up to foreign banks and other financial services in order to maintain its important position at the forefront of continuous economic globalisation (Taylor, 2004). In the context of an increasingly global economy, London is reckoned as a major player in the world city network (Taylor, 2004; Newman, & Thornley, 2011).

2.4.1 Competition for Command Functions

Urban areas are able to compete for the key control and command functions of financial and governmental sectors. Such competition requires certain infra-structural provisions, including efficient transportation and communication services, which typically involves massive public investment in airports, rapid transit, and other communication systems. It also requires a great deal of adequate office space which is likely to require a public-private coalition of property developers and financiers. A wide range of supporting services will also be required, including improved educational provision, especially for business, international and corporate law, and information technology.

Sassen (2011) explains how it is necessary for global cities to improve their ability to trade, finance, service, and invest globally. Such capabilities must be seen as a priority for the global city itself, especially when it seeks to host large numbers of foreign firms.

2.4.2 The Impact of Globalisation on Real Estate Markets

Globalisation embraces both complementary and competitive activities (Keivani, Parsa, & McGreal, 2001). The process of globalisation is increasing competition between urban areas for the attraction of investment (Adair, Berry, McGreal, Sýkora, Parsa , & Redding, 2007).

All this implies that cities have to make themselves distinctive while at the same time it enables them to integrate with worldwide cultural and socioeconomic trends (Yeung, 1998). To do this, cities need to team up with each other, forging links both nationally and internationally. This requires a cohesiveness which involves a significant level of mutual cooperation, while simultaneously seeking to promote those distinctive features that can give them a competitive edge, attracting investment and maintaining or building their status within the global hierarchy (Keivani, Parsa, & McGreal, 2001). Two factors are key to their success in this regard: first, they have to provide the institutional strength that can attract investment and support entrepreneurship, and secondly, they have to offer an external market of sufficient size to make incoming business viable (Amin & Thrift, 2006).

Urban development and change are constrained by the existing built environment, which makes the role of real estate markets crucial for the competitive stance of cities in general. The real estate sector offers specific investment opportunity based on locational advantages that are essentially dependent on human, physical and institutional infrastructure and are also major factors influencing property development and investment.

Francis (2016) notes that global trends can influence real estate values by altering perceptions both of individual buildings and their locations. In both cases, the “attractiveness to users” will have a direct impact on income stream and on the value of the property.

Real estate as an investment asset is increasingly shaped by global market forces. Dissolving barriers of capital movement and increasing information flow has promoted real estate as an international investment asset. McGreal et al (2000) highlight that the traditional reasons for including real estate in an investment portfolio are as follows: firstly the perception that real estate involves lower risk; secondly, the real estate markets tend to be less unstable than other investment media and thirdly, real estate facilitates transformation and, finally, real estate can help to attain balance a diversified portfolio.

Figure 2.3: Largest Markets for Cross Border Investment (source JLL 2016, p2)

Figure 2.3 illustrates the largest markets for cross-border investment. The USA is in first place, followed by the UK. Multi-national corporations have made strategic decisions, where local regulations have permitted, to own their real estate in overseas locations like in the USA or Asia Pacific (Worzala and Sirmons 2003).

In summary, real estate has become a global investment medium; cities with a clear strategic vision offering the right infrastructure, high quality real estate products and regulatory environment will attract the bulk of international real estate investment. Hence advanced and clear real estate markets contribute to the development of global cities.

2.5 Mega-Urban Projects; Yield of Globalisation

Intercity competition for world city status, combined with a huge influx of global consumer and finance capital, have been the drivers for an unprecedented boom in mega urban flagship projects (Figure 2.3), which is intensively restructuring and expanding urban space in ways that are sometimes environmentally unsound.

The past two decades have witnessed the advent of a new era of mega-projects throughout the world (Altshuler and Luberoff 2003). The more general reasons for this boom include (Douglass, 2005) 1. Globalisation needs global-size projects, which has the effect of increasing the size expectations with every subsequent Mega Project 2. Private sector involvement in mega-projects has increased since 1980 when public projects began to be turned over to private developers through BOT (Build-Own-Operate [-Transfer]) and other arrangements 3. Projects are vastly easier to run remotely due to lower transaction costs in all phases of project development and 4. .Improved techniques and materials mean constructing high-rise building is now possible and, finally, there has been an increase in the number of mega-container ports, world hub airports, and high-speed trains for trucking. Mega-projects are almost unstoppable from the political tier once they are underway and the pathology of under-bidding for contracts, cost over-runs and complexity risks allows for ready approval of mega-projects even in situations where many similar ones have failed (Flyvbjerg et al, 2003).

The search for growth and competitive redevelopment has become a leading objective of neo-liberal urban development in an attempt to re-assert the position of cities in the emerging global economy (Harvey, 2007). Enhancing the competitive advantage of cities is seen as largely dependent on improving and adapting the built environment to the accumulation strategies of a city's key elites (Swyngedouw et al, 2002).

In summary, the magnets for the current wave of mega-projects are an intensified process of globalisation that has focused on national energies of huge city regions, and therefore are inseparable from the urban transformation of the built environment in cities during the past several decades.

2.5.1 Mega-projects-Definition and Terminology

Mega-projects are large-scale, complex ventures that typically cost $1 billion or more, take many years to develop and build, involve multiple public and private stakeholders. They are transformational and have an impact on millions of people (Flyvbjerg, 2017).

One way of defining mega-projects is to consider the size of the project, typically by capital, as a measure for organisational complexity. Flyvbjerg et al (2003) do not provide a lower measure for their data set of 258 transport infra-structure projects, but evaluation of their scatter diagrams (2005) shows that most rail and fixed-link projects spent more than €100m at 1995 prices.

Whilst there is no standard description for the term "Mega-projects", these projects are defined as programmes that integrate strategically-aligned projects into one very large project (Miller and Lessard, 2000) and mega-projects that over 1 billion (U.S. Dollars) capital (Flyvbjerg et al. 2003, Merrow 2011, Koppenjan 2005, Turner 1999). Financing is mainly by government and the projects are implemented by the private sector. These projects are frequently classified as risky, complex, with high social impact, engaging with a diversity of stake-holders (Merrow, 2011).

The above discussion would suggests that MURPs cost at least $1 billion (U.S. Dollar) at current prices, based on Merrow's definition, while many authorities and researchers would expand this measure by including those projects that cost over the 500m mark (depending on the currency). However, such a definition is completely arbitrary, and is also dynamic because the inflation rate over time and cost escalation during the lifetime of the project will inevitably alter these costings.

This research will apply the Merrow (2011) definition to an examination of MURPs. Although there has been a great deal of research on the project management aspects of mega-projects, there is limited literature on the particular nature of large and complex projects as a category. Although there is an emerging body of research examining specific MURPs, this does not yet offer sufficient detail to analyse the category as a whole. Amongst them, outstanding publication by Morris & Hough (1987), Miller & Lessard (2000), Altschuler & Luberoff (2003) in different ways add to our understanding of

this area. All these authors have been selected to use empirical data from a number of cases as their starting point. They all point towards 'the whole picture'- identifying what creates the problem and suggesting answers as to how this problem can be addressed. Table 2.3 represents a brief summary of the studies.

As demonstrated on table 2.3, the research investigates six prominent attributes commonly associated with mega-projects, as follows:

- Extreme complexity: the complexity of mega-urban projects arises from different aspects. Flyvbjerg et al. (2003), Pryke & Smyth (2006) and Merrow (2011) all emphasise that a vast number of project stakeholders, including contractors, governments, private sector, suppliers and financiers will inevitably contribute to increased complexity. Complexity arises due to each stakeholder's specific own interests which may not be aligned with those of others.
- Engaging many resources: MURPs consume large amounts of resources including equipment, labour, capital, material and facilities, which have a significant impact on the project performance.
- Long project schedule: It may take several years for the final delivery of the project to occur and to achieve the expected production goals (Merrow 2011).
- Technology: The need for new technologies in some mega-projects delays the progress of those projects due to their complexity and the lack of relevant past experience within the project team (Whitty & Maylor 2009).
- Social and political significance. Sometimes MURPs generate a great deal of public interest, so that their success becomes critical, not only to their investors, but to the general public and governments. This places mega-projects at the centre of attention for politicians, since those projects can have significant impact, either positive or negative, on their electoral fortunes (Hall p, 1982)

Table 2.3: Brief Summary of the Studies (source: author, 2012)

Olds (1995) provides one of the earliest definitions of MURPs. Typically they are large-scale mixed-use redevelopment projects, constructed on a wide range of land type, often in derelict or under-utilised areas. They are often in the inner city but sometimes further afield within the wider metropolitan region.

MURPs are increasingly being developed as part of an ongoing transformation of urban development throughout the world. Many projects include conspicuous high-profile buildings – for example London's Canary Wharf – which quickly re-orientate the international imagery of a city (Sudjic, 2012). Nine Elms infra-sturcture-led regeneration development which has attracted billions of foreign investment funds is another example of globalisation located in central London. These projects are therefore deeply implicated in the contemporary globalisation processes affecting our world in the late 20th century.

Although some research has been conducted on Mega-Projects there appears to be a significant gap in the research into the comparative nature of MURPs, with even fewer analyses moving beyond simple abstract assertions regarding their success factor, or a basic tool for evaluation of such projects before they were

constructed. This is unfortunate since the number of MURPs is increasing daily around the globe. They have a very long construction process due to their size, and there is an immense amount of public and private money invested in them. All of this suggests that MURPs could result in a great deal of wastage if they are not wisely planned, managed and constructed.

2.6 Summary

This chapter confirms the findings of Tallon (2013) that economic globalisation influences urban form and functions. Hence any framework to evaluate urban regeneration projects needs to consider globalisation and, in particular, the availability of finance and the need to attract/retain talent. This chapter reviewed the major themes influencing the transformation of the urban environment and shaping the practice of MURPs in different cities. Central to this has been the competitiveness between cities. Public authorities today – after two or three decades of neo-liberalism – are seen less as service providers and more as enablers, shifting responsibility for urban planning away from the state and towards the private sector. Globalisation at once makes the world more homogenous and at the same times encourages the differentiation that is necessary for genuine competition. This in turn has led cities to pay renewed attention to re-branding and marketing themselves. Where in the past, a city's importance might be reliant on its geographic location (the nearness of a river or a coast, for example, or its closeness to a natural resource) today what makes a city distinctive is the quality of its urban environment. Accordingly, the main role of city regulators or planners becomes one of creating the conditions to make their city more attractive to potential investors or businesses.

This chapter has therefore argued than while, for centuries, the excellence in the urban quality has resulted from an economic prosperity of cities, currently, this has become a mutual process in a way that enhancement of urban spaces promote economic development of cities. The chapter has discussed the way that globalisation perceives the world as a single trading marketplace, without socio-political barriers and constraints. Global cities are now changing their strategy from dispersive approaches towards more free market schemes aimed at chasing up economic competitive reforms. The study has shown that it is

essential for cities to accomplish objectives of growth, competitive development and restructuring in order to sustain their position in global economy. The chapter concludes that mega-projects are a most pretentious manifestation of globalisation but provide a firm foundation for the future growth and transformation of cities in global world. At the same time, urban revitalisation goes beyond the city and extends to regional recovery and globalisation strategies.

After discussing the concept of globalisation and how it has led to the emergence of new urban policy pattern, the next chapter will examine MURPs in-depth, in pursuance of the original objectives of this research.

3| Literature Review:
Mega Urban Regeneration Projects

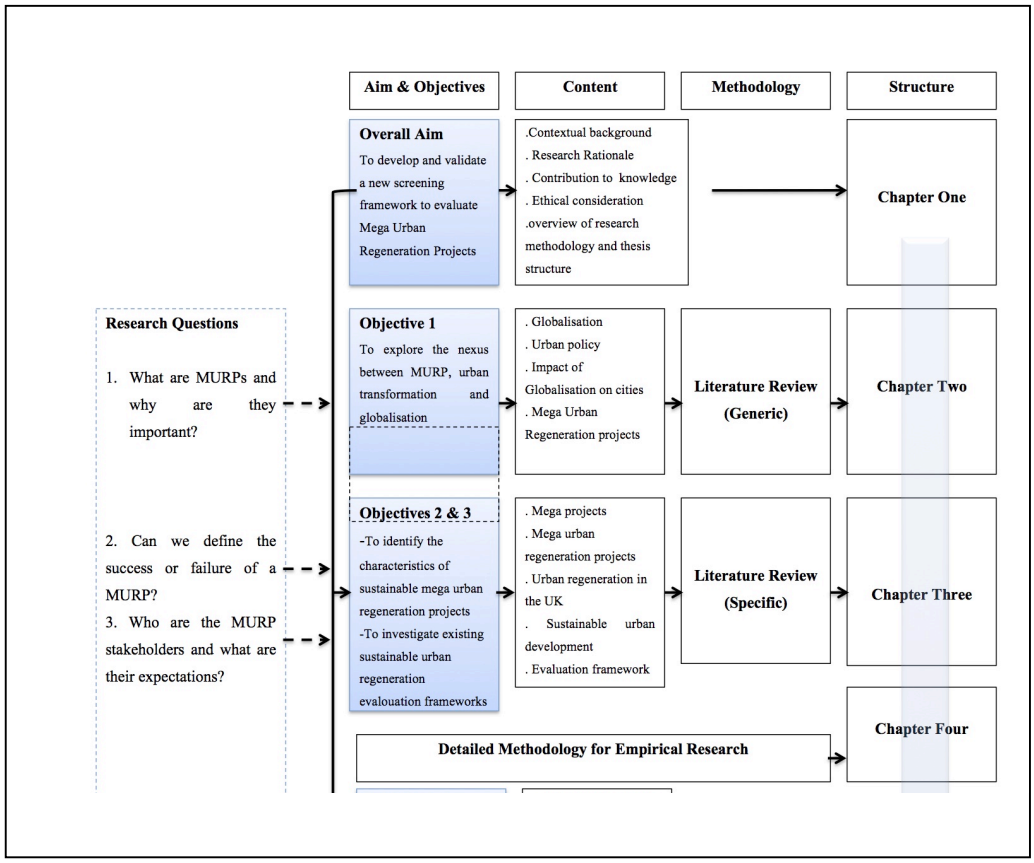

Figure 3.1: Thesis Structure (Corresponding objective, methodology and chapter structure)

Chapter 3: Mega-Urban Regeneration Projects (MURPs)

3.1 Introduction

The focus of this chapter is on mega projects, and particularly on Mega Urban Regeneration Projects (MURPs). The chapter looks first at the successes and failures of various existing MUR projects, and discusses the need to develop systematic MURP evaluation models. This chapter therefore extends the literature review begun in Chapter Two with a view to addressing two objectives of the thesis, namely to identify the characteristics of sustainable mega-urban regeneration projects; and second, to investigate and analyse existing sustainable urban regeneration models (Figure 3.1). Chapter Two reviewed the major issues and themes that influence the transformation of the urban environment and shape the practice of mega-urban regeneration developments in cities around the world. As argued in the previous chapter, the wider dimensions of globalisation have given rise to the formation of new configurations in the social and spatial systems of urban areas (Pryke, 1999). There is, however, a dialectic between the neo-liberal view that mega-projects can stimulate urban growth and a Marxist critique of Harvey's theory of uneven geographical development.

There has been an increase in diversity of mega-projects over the globe, for instance the infra-structure projects, construction of new airports, skyscrapers and the large housing and commercial schemes. Swyngedouw et al. (2002) found that MURP as a neo-liberal approach has attracted a selective democracy class and governs more privileged priorities. They have progressively been used as a vehicle to establish exceptional measures in planning and policy procedures (Al Darmaki , 2008).

Chapter Three aims to clarify the definitions of regeneration, revitalisation and contrast these terms with gentrification. Given the complexity of this task, the purpose of this chapter is, therefore, to approach the literature in a systematic way in order to investigate current MURPs.

The chapter is structured as follows: Section one defines a MURP, indicating its potential problems, controversy and the knowledge gap. In section two, the main characteristics of MURPs are outlined. The third section provides further discussion of urban development in the UK; the economic crisis of 2007 and its impact on mega- project financing will be discussed, followed by a post-crisis era scheme to financially support MURPs. It then presents an overview of urban development in the USA and examines various financing tools, such as TIF, as new financial models to address the economic difficulties and unblock investment for MURPs in the UK. Fourthly, the chapter will explore the strategies that enhance MURPs, and their potential for success and failure. Finally, the chapter will explore MURP evaluation frameworks

3.2 Urban Regeneration in the UK

3.2.1 Urban Regeneration Policy in the UK

The origins of urban policy in the UK date back to the 1930s, when the government began to take direct action to deal with the problems generated by mass unemployment. Urban and regional policy in the UK was developed as a series of trials proposed by governments following their own ideological approach on policy, which might then be reversed by a subsequent government. Early policy (1940s-1970s) aimed to create geographically mobile investment in areas with an employment deficit. From the late 1970s, there was a particular focus on the inner cities, which were beset by social and economic problems. When Thatcher was in office, urban policy was led by the market and by property investors, which led to a focus on relatively small geographic areas with initiatives to support disadvantaged residents (Crowley et al, 2012).

The urban policy of the 1990s and 2000s has focussed more closely on the demands of disadvantaged people, with a view to creating holistic economic and social regeneration mainly at the level of the ‘neighbourhood’. Alongside this, the government has tried to reduce regional inequality (Crowley et al, 2012).

Atkinson and Moon (1994) outline the changes to UK cities brought about by Margaret Thatcher’s strategy of shifting power away from the state and towards the private sector. When New Labour came to power in 1997, Tony

Blair's government set about trying to address some of the problems of social inequality that Labour felt were caused by Thatcherism. There was a particular emphasis on "narrowing the gap" – reducing inequalities between regions and also between different districts of particular cities. They had a special focus on regions, and especially on "city regions" – introducing Regional Development Agencies (RDAs), Multi-Area Agreements, City Region Pilots, and City Strategy Pathfinders. They also introduced area-based initiatives and targeted funding streams – examples of this would include New Deal for Communities (NDC), Working Neighbourhoods Fund (WNF), and Local Enterprise Growth Initiative (LEGI) (Crowley et al, 2012).

Roberts (2000) records how, since 1945, the responsibility for social reconstruction has tended to change hands in line with the general social and political transformations that were taking place in broader society, towards the current model of public-private partnership. He also notes that the post-war reconstruction projects were the UK's earliest attempts at urban regeneration.

There is a possibility that these new paths to economic development, based on considerations for growth and market flexibility, will in fact worsen inequality. Where incentives are provided to investors, there is a risk that this will create a scenario of winners and losers. The areas, which show strong economic growth, will continue to attract investment, while other areas may be left behind (Crowley et al, 2012).

Although table 2.3 in the previous chapter provides an overall summary of the different urban policies since the Second World War, a number of elements require to be clarified in detail, as will be demonstrated in the following sub-sections.

1945 - 1979

After 1945, war impairment was one of the most noticeable planning problems issue major UK cities were facing, along with low quality housing and urban sprawl. In this period three major policies under Town and Country Planning, Regional Development and Housing Policy, were established which were New Towns, Greenbelt and housing redevelopment (Tallon, 2013).

The Greater London Plan (1944) introduced the New Town concept, which aims to facilitate the overflow of population from overcrowded metropolitan cities onto green field sites containing low previous settlements. Tallon (2013) reports how one of the shortcomings of the New Town's policy was that its focus tended to be purely on physical construction, at the expense of socio-economic factors that were exacerbating social problems in urban areas.

Greenbelt – an attempt to curb untrammelled urban growth – was another major policy to emerge during this period (Han, 2017). As well as putting limitations on the expansion of cities, Greenbelt sought to protect rural communities and the natural environment (Ruming, Houston, & Amati, 2012). Tallon (2013) opposed to the Greenbelt policy considers the debate that began in the late 2000s regarding the expected housing shortage of 3 million required by 2020 which makes development on greenbelt land inevitable in the near future.

Slum clearance, and their replacement by new housing schemes, was another significant policy shift that developed between 1945 and 1979. The policy was largely driven by the public sector, and was specifically designed to regenerate impoverished areas. (Couch, , Sykes, & Börstinghaus, 2011).

In summary, from 1945-1965, urban policy was mainly concerned with physical construction, while socio-economic factors became increasingly important between situation where inner city poverty was often situated cheek-by-jowl with the wealthy suburbs.

From 1979 - 1997

The period from 1979-1997 is noticeable because of a shift from the public to the private sector, as the Conservative government sought to encourage the entrepreneurial spirit. This period was distinct; it was a movement away from social welfare projects, with increased deregulation and the fostering of public-private partnerships. New initiatives at this time included the establishment of the Urban Development Corporations (such as the London Docklands Development Corporation and the Merseyside Development Corporation); Enterprise Zone (EZs); and the introduction of the Urban Development Grant

(UDG) to combat inner city poverty. In conjunction with the establishment of Inner City Enterprises was another scheme established at this time which intended to address inner city problems. Tallon (2013) notes that while the problems identified at the beginning of this period were those of too much state intervention, by the end of the period, it had become evident that the reversal of that trend had resulted in further social problems and inequalities.

Imrie and Thom (1993) documented many of the problems being caused by private sector-led regeneration; articulating the growing concern that poor communities were not genuinely benefiting from the supposed regeneration of their own local areas.

From 1990 - 1997

After 1990, policy shifted towards a three-pronged approach, in which the public and private sectors were joined by the community and voluntary sector (Davoudi & Healey1995; Tallon, 2013). Two key regeneration policies were City Challenge (1991) and the Single Regeneration Budget (1993), which allocated funds on the basis according to the scale of social and economic deprivation in localities. A new funding mechanism was introduced, instigating a competitive bidding process to organise the distribution of funds (Atkinson & Moon, 1994). The quality of the bids thus became of paramount importance; it was believed that this system would encourage innovation in deprived areas, rather than simply alleviating needs (Tallon, 2013).

From 1997 - 2010

Carmona (2010) reports how New Labour sought to address the problems caused by the urban planning strategies of the previous period. New Labour argued that planning policy had been short-term and was lacking in strategic vision; this had led to an absence of public sector interest in urban design, leading to a consequent decline in design quality. New Labour attempted to launch an "urban renaissance" which would attempt to ensure that their urban planning would make a much stronger effort to tackle social exclusion. (Tallon, 2013). To accomplish this, the government created the Urban Task Force (UTF), charged with identifying and addressing the causes of decline in urban

areas with a view to ensuring sustainable regeneration (UTF, 1999). The Urban White Paper and the UTF have, however, since been criticised by numerous academics; it succeeded in placing a disproportionate emphasis on design quality at the expense of more pertinent socio-economic factors (Colomb, 2007).

From 2010 - present

The New Labour government was replaced in 2010 by a Conservative and Liberal Democrat coalition, which aimed to promote a decentralised, local policy agenda (Goodchild & Hammond, 2013) This agenda met with opposition from some people – often Conservative supporters - in the suburbs and rural areas, who were concerned that a focus on urban areas would negatively affect their own environmental standards and amenities. Other groups also sought to engage with the coalition government on this initiative. Local authorities were keen to ensure that their own areas would not be neglected, and environmental bodies aimed to give greater prominence to green policies. Those promoting urban regeneration wanted to ensure that the government did not neglect areas of potential future decline (Goodchild & Hammond, 2013).

The coalition worked to address these concerns, rebalancing spatial inequalities and looking for evidence that regeneration policies were economically and socially viable. They also reduced the amount of central funding available, arguing that neighbourhood renewal should be led by local partnerships and community action (Lupton & Fitzgerald, 2015).

The Localism Act (2011) had the aim of shifting power from central to local government – giving greater emphasis to local authorities, communities and individual action (Tallon, 2013). In 2012, they launched a national planning policy framework (CLG2012b) that was intended to strengthen the economy by encouraging competition. Its stated aim was to revitalise town centres while at the same time supporting regeneration in rural areas, interlinked by an improved and sustainable transport system.

The Heseltine Review (2012) aimed to shift urban planning towards promoting

economic growth in the targeted areas, with the introduction of Local Enterprise Partnerships (LEPs) with the authority to create Local Growth Deals that would fund housing and infrastructure developments. Another new initiative, "City Deal Status", gave special powers to 28 urban areas to attract private investors who could demonstrate their ability to innovate and remain efficient (Lupton & Fitzgerald, 2015).

In other words, this major focus on economic regeneration and development of local areas in the 2010s has sought to liberalise the planning system, facilitating the development of infrastructure and property while devolving control away from the centre. This gave local bodies a greater say in the construction and management of MURPs.

3.2.2 Institutional Theory and Urban Planning

The Institutional approach influenced urban communities with the workings of selected local government by affecting local decision-making and led to the growing fragmentation of urban government and the rise of partnerships (Lowndes, 2001). Improving the quality of places is attracting increasing policies. Healey (1998) argues that a key element of good urban governance lies in the quality of local policy cultures that are well integrated, well connected, and well informed, and can mobilise readily to act to capture opportunities and enhance local conditions.

In Britain the change is in urban governance capacity which encourages catalytic projects and partnerships. This approach emphasises the importance of building new policy discussions about the quality of places, developing collaboration among stakeholders in policy development as well as delivery, widening stakeholder involvement beyond traditional power elites, recognising different forms of local knowledge and building rich social networks as a resource of institutional capital through which new initiatives can be taken rapidly and legitimately (Healey, 1998).

The following sub-sections review four major models of urban policy introduced by t New Labour and continued by the Coalition government.

3.2.3 Models of Urban Regeneration in the UK

Since the late 1970s, urban policy has become increasingly focussed on regeneration. Recognising that cities are complex and dynamic systems, planning policy aimed to encourage cities themselves to become agents of their own re-transformation (Roberts, 2000).

Dalla Longa (2011) outlines eight different models for transforming cities: Urban Renewal, Urban Redevelopment, Urban Regeneration, Urban Recovery, Urban Revitalization, Urban Framework, Urban Gentrification, and Urban Restructuring (Dalla Longa, 2011). Below we consider each in turn.

The term Urban Renewal is used to refer to rebuilding of European cities following the Second World War (Smith, 2002). Urban Redevelopment refers to the creation of a new urban elite, with its own decision-taking network and the proliferation of new business communities (Le Gale`s 2002). It is also a term used to describe the process leading to the more recent phenomenon of Public–Private-Partnerships (PPP).

Urban Regeneration was a term originating from the post-war city, applied to projects aiming to address both criminality and unemployment (Smith 2007). Avery (2007; cited by Dalla Longa, 2010) notes that the term was used again in the UK in the 1980s and 1990s to describe the process that involved the establishment of ad hoc agencies to intervene in city life in terms of culture, economy, the environment and even politics. Robert and Sykes (2000) suggest that Urban Regeneration was often marked by divided or even contradictory objectives, such as the competing needs of the environment and the economy. The term is also used for those policies that attempt to return derelict land and buildings to favourable use (Dalla Longa, 2010).

The term Urban Recovery refers to an exclusive physical aspect of the built property and has a direct consequence on the components of the urban structure, dealing with maintenance and conversion (Douglas, 2005).

According to Smith (2007), the term Regeneration was used to refer to policies designed to support the full legitimization of “gentrification.” Tallon (2010),

believed Gentrification is a diverse and all-round process which involves physical, economic, social and cultural transformations. In the UK, gentrification tended to be associated with the rehabilitation of older inner city housing areas, resulting in a class transformation of the area from working-class to middle-class, beside a change in tenancy types from private renting to owner-occupation (Hamnett, 2003).

The term Urban Restructuring explained the change that took place in the 1980s, upon the establishment of modern globalisation and restructuring of production sectors that embrace a strong influence on urban areas (Dalla Longa, 2010).

This thesis is particularly interested in Urban Regeneration which attempts to reverse urban decline by creating a physical structure which is intended to have a significant impact on the local economy. The term regeneration thus takes on a more social connotation, containing an economic element in which the physical component is less important.

Having explained the different models of transforming cities, different types of urban regeneration models will be demonstrated below. There are four different types of urban regeneration models in the UK; retail-led, housing-led, design-led and culture-led regeneration.

Retail-led Regeneration:

Since the 1980s retail-led regeneration has been a leading urban regeneration model and is acknowledged as a crucial way of revitalizing urban areas by providing jobs, stimulating economic development, creating attractive places and as an important place-making tool in wider urban regeneration (Kima & Jang, 2017).

In the UK, the government of the 1980s tried to attract investments by using retail centres as a way for regenerating deprived areas; thus the Enterprise Zones (EZs) been introduced. This EZ policy was to support business activities by allowing tax relaxation or accelerating the application of statutory or administrative controls which led to the development of several retail centres on brownfield land such as the Swansea enterprise zone, West Quay Shopping

Centre in Southampton or the Westfield Shopping Centre in Stratford, London (Lowe, 2005).

Housing-led Regeneration

In the final years of the twentieth century, urban planning was increasingly concerned with repopulating and revitalising inner city areas (Tallon, 2010). It had been noted that there had been a population decline in city centres, as a result of upwardly mobile citizens migrating out towards the suburbs, a phenomenon recognised by the UK government as early as the late 1960s (Cameron, 1992). The government strove to encourage a "back-to-centre" approach that would see shops and services returning to the inner city, along with encouraging people to take up residence there. By the 1990s, planning policy was actively designed to shift economic activity back to the city centre and away from the out-of-town shopping complexes that had marked the previous era (Tallon, 2010). Policies to promote this included 'living over the shop' (LOTS) strategies (Bromley et al., 2005), which New Labour aimed to supplement with their proclaimed "urban renaissance, which would make inner cities more attractive places to live and work (Bromley, Tallon, & Thomas, 2005). Sometimes labelled gentrification, the policy was justified on the grounds that it would encourage the wider regeneration of the city (Lees, 2008).

High-density urban living was first introduced by Le Corbusier (1929) who had first explored what he called high-density urban living; this would reduce travel distances and encourage an energy-efficient urban development. It was an idea revisited by Roger's concept of the sustainable city (1997), in which "compact and polycentric" communities would help create greener and more sustainable cities.

Design-led Regeneration

Bell and Jayne (2010) describe design-led regeneration as being marked by flagship buildings, greatly improved retail and residential areas, along with urban beautification projects such as fountains, boulevards and landscaping. By improving the urban arena, and at the same time rebranding and marketing the

city, planners could help to stimulate a sustainable urban regeneration (Florida, 2002).

By the beginning of the 21st century, many British cities – including Manchester (Williams, 2003), Birmingham and Glasgow (Garcia, 2005) were beginning to undertake design-led strategies that would help them be better run, greener, and more prosperous. Nase et al (2016) explain one particular advantage of such design-led strategies, namely improved property values, which in turn rejuvenate the city and lead to better communication networks. Individual buyers are attracted to better quality, beautifully designed and well-built properties, and this in turn helps to enhance the city's sense of its own social and cultural identity (Nase , Berry, & Adair, 2016).

Culture-led Regeneration

Culture-led approaches involve a range of tools for regenerating declining city areas, from the rehabilitation of iconic buildings to the organisation of local cultural events. Tallon (2010), believed culture-led regeneration schemes are a catalyst and an engine for regeneration of cities such as the formation of flagship developments.

Flagship developments such as MURPs are intended to enhance living standards, boost employment and create an attractive place for people to live and work. For instance the Liverpool One MURP is intended to revitalise the city centre area of Liverpool. The new elements include 148,500 sq. metres of retail space, bars, restaurants, a bus station, BBC studios and a remodelled park, bordered by a hotel, 600 apartments and a new multi-screen cinema. As a result, the scheme is now a destination of regional, national and international significance, as well as a magnet for major and niche brands. The plan has delivered 3,300 new jobs in construction and 5000 permanent posts in a more unified city.

London's South Bank precinct is often seen as a successful example of a cultural quarter being used to promote wider regeneration (Taylor and Murad, 2010). This has encouraged other cities to consider cultural impacts when planning urban regeneration; this means that culture is increasingly seen as an essential factor in promoting both inward investment and tourism (Hayllar, Griffin , & Edwards, 2008).

3.2.4 The Impact of the Financial Recession –Barriers on Financing Urban Regeneration Projects

Once the recession hit the UK in 2008, regeneration projects have declined due to public spending cuts, borrowing restraints and uncertainty among private investors. Global financial markets are now ubiquitous in an environment where the competence of the private sector to finance infrastructure is severely constrained in the short term, at least.

According to Perkinson (2009), in different parts of world, the international credit crisis and economic downturn has significantly affected urban policy (Parkinson, 2009).

The climate of economic downturn often makes it difficult to find investment for new MURPs, with a general lack of financing packages, exacerbated by a lack of fluidity in the financial market. These, in turn, increases risks for those who do invest which has predicted a decline in the availability of finance for large-scale projects (Lyon, 2009).

Lyon (2009) outlines several reasons for the decline in funding for potential MURPs. First, lenders themselves have less access to capital, which means that lending capacity is severely reduced. Banks have become much more conservative about lending, conscious that over-extension of lending was one of the prime factors of the GFC. All of this makes markets more uncertain and this compounds risk. Where banks do agree to lend, they tend to place more stringent conditions on the loan, and they prefer short-term loans to the long-term loans necessary to find large-scale projects like MURPs. Banks also prefer to pass risk on to the borrower, resulting in tougher and more expensive repayment conditions. International financing is becoming less common, since lenders prefer to invest their limited capital locally, and this cautious approach to the market is becoming the norm, where a MURP requires investors who are creative and ambitious.

The financial crisis of 2007, which happened as a result of ‘sub-prime’ mortgage lending, caused the downfall of several large banking institutions and resulted in the global limitation of credit. To deal with this crisis in the UK, an initial attempt by Prime Minister Gordon Brown involved neo-Keynesian methods, which – after the victory of the Conservative party coalition in 2010 –

was replaced with a plan for austerity in public spending. As a result, the available funding for urban regeneration has been radically reduced, and a huge number of the institutions formed in more prosperous times have been disbanded. This emergence of alternative financial models from other countries has proven useful in getting MURPs off the ground, with a view to stimulating growth and fostering social cohesion in the most deprived neighbourhoods.

Current urban development challenges have called for new (and recycled) economic and financial models to overcome these economic difficulties and to unblock investment for MURPs in the UK.

3.2.5 Financing MURPS in the UK after the Global Financial Crisis – Emergence of Innovative Funding Methods

The position played by real estate, which has always played a major role in shaping modern economies, has come under closer scrutiny following the Global Financial Crisis (GFC) of 2007-8. Governments and regulators now pay even closer attention the role of lending institutions in the property market, striving to ensure that there is an acceptable balance of debt with equity, that risks are properly assessed and priced accordingly. There is also an emphasis on improving the partnership structure between the public and private sectors, to secure a satisfactory return on investment (Adair et al., 2011).

Securing a source of finance for sustainable urban regeneration projects is crucial. In the UK with the emergence of the 2007 economic recession, the amount of available funds and finances for regeneration project has become restricted and limited. This has had a significant impact on such projects (Coaffee, 2009). These continuous financial challenges in both public and private sectors means severe limitation for regeneration projects of the 2010s which has led to the introduction of new ways to financing urban projects and to learn good practice (Adair et al, 2012; 2007).

The challenge of financing urban development, allied with capital budget restrictions, has suggested the emergence of innovative finance instruments. . According to Strickland (2013), the need for international finance and

development is a consequence of the economic crisis and has resulted in reduced inward income of public sector funds. Most OECD countries have reduced public expenditure in an attempt to curb public debt, resulting in budget cuts (Merk et al., 2012). According to Adair et al (2015), there has been a consequent reduction in traditional funding routes for infrastructure and regeneration development projects, together with a clear need to explore alternative routes.

To address the challenges of financing mega-projects, governments and developers are continually seeking new financing tools and methods to pay for these huge projects, along with new ways to start off the projects sooner (De Bruijn and Leijten, 2007). In the current climate of challenging economic conditions, real estate development tends to be financed by a mixture of loans and grants (Bilal and Kratke, 2013).

For more than a decade, the UK government has been looking to secure greater involvement of the private sector in financing urban development (Miliband, 2005). Kwak et al (2009) emphasise the advantages of taking this approach: it not only adds to the amount of capital available, but also shifts risk away from the public sector, given that private investors are both keen and experienced in seeking a return on their investment. The involvement of private sector funding thus helps ensure that new MURPs provide value for money. Carter (2006) notes the importance of introducing flexibility into the investment process, but the new policies are not without problems of their own. For example, the British Property Federation (2008) has suggested that the new funding mechanisms in England and Wales such as the Community Infra-structure Levy are insufficient to finance infra-structure in areas that urgently need regeneration.

The private sector currently plays a fundamental role in the urban regeneration process in the context of encouraging property development and investment. The use of capital within regeneration improves the point of access and increases the availability of finance; hence the large-scale urban developments would have higher dependence on private investment (Adair et al, 2000). In summary, the literature perceives the urgent need to identify alternative funding sources for infra-structure and regeneration development projects.

The World Bank's definition for innovative finance involves non-traditional forms of funding through private mechanisms, solidarity mechanisms, public–private partnership (PPP) mechanisms and catalytic mechanisms (Grishankar, 2009). Public private partnerships (PPPs) are considered a particularly innovative way of financing development, easing public budgetary constraints while improving the quality of public services, encouraging innovation and sharing risks more evenly (Liu and Wilkinson, 2014). The formation of PPPs is supported by government ambition as a strategy for the financial restraints in the procurement of public facilities and services by involving private management skills to increase the efficiency, effectiveness and quality of facilities and services delivery (Bing Li, 2005).

The UK now has a range of finance packages available to promote property development on both a short-term and a long-term basis. This varies according to the nature of the project and how much risk the lender is prepared to take. For developers, the safest approach is to secure funding from a financial institution, and then to a find a mechanism to build a bridge between short-term and long-term funding (Wilkinson et al, 2008).

The most frequent used Public Private Partnership ((Alberti, 1996) PPP) model in the UK is the Public Finance Initiative (PFI). According to a questionnaire survey taken by Bing et al, (2007) which examined the relative importance of 18 potential critical success factors (CSF) for PPP/PFI construction projects in the UK outlined that the three most important factors are having a strong and good private consortium, appropriate risk allocation and an available financial market..

Short-term funding is more appropriate where developers wish to remain flexible, wanting to be ready to sell the property quickly if market trends shift. Conditions placed on the loan will vary according to the project itself and also on the financial strength of the developer – the higher the risk, the worse the conditions that will be imposed by the lender. It should be remembered also that real estate is in competition with other forms of investment that may offer the lender greater liquidity, meaning that special attention needs to be paid towards making the property more attractive to investors (Wilkinson et al, 2008)

Over recent decades, UK governments have tended to prefer urban regeneration finance packages that combine public sector funding with significant input from the private sector. The intention is that this pooling of funds can successfully finance long-term sustainable investments. Examples of this type of financing include Urban Priority Areas, Regional Development Agencies (RDAs), Urban Regeneration Companies and Local Economic Partnerships. At the same time, UK planners are investigating new ways of financing MURPs, including mechanisms learned from the US experience, including Real Estate Investment Trust (REITs) which for many years have provided American investors with a way of gaining a return on their investment in privately rented property (Adair et al, 2000).

In the UK, financial power has devolved from central to local government as one aspect of a local agenda that sees increasing financial responsibility passed onto local government. This shift can be viewed as an opportunity for local authorities to use innovative financial instruments, such as Tax Incremental Financing (TIF), as they become more financially autonomous (Hutchison et al., 2012).

Peck and Theodore (2010) identify Business Improvement Districts (BIDs) as a vehicle for mobilized policies and new forms of globalising neo-liberal urban governance. BIDs are becoming popular globally among different urban and national settings since they are designed to deal with highly divergent local conditions in urban places (Michel & Stein, 2014).

UK institutional bond investments are one of the innovative financing methods which in the last 50 years have witnessed a shift in the proportion of institutional money towards fixed income investments (Adair et al., 2007). The use of bonds in the infra-structure phase of development was promoted in an Investment Property Forum sponsored research project in 2006 that investigated the necessary conditions for institutional investment in regeneration (Investment Property Forum, 2006; Adair et al., 2007).

UK MURPs are commonly financed by joint agreements between the public and private sectors specially when there is little funding available from the public sector. However, there are some types of funds and grants available to

invest in the construction sector, such as the European Regional Development Fund, the Growing Places Fund and Get Britain Building.

Established in 1975, the European Regional Development Fund **(**ERDF) was intended to ensure that EU membership could provide economic benefits in the home country – the UK and Italy were two of its main instigators. The ERDF provides financing for: (a) investment in developments that contribute to the creation of sustainable jobs, mainly by direct aid to investment in small and medium-sized enterprises (SMEs); (b) investment in infra-structure and (c) development of projects that support regional and local development.

Many viable developments are not able to make progress, in the current economic environment, due to the capital limitations that have diminished the pool of investment in the physical infra-structure which would unlock development (GOV.UK, 2013). The Growing Places Fund aims to address this situation by making the funds available to support improvement in economic growth by funding the essential infra-structure that will help to create new jobs and homes by getting delayed projects moving again (GOV.UK, 2013).

Risk remains a key challenge for innovative development finance mechanisms. Large scale projects such as MURPs bring great opportunities, but they also carry sizable risks. This needs to be considered alongside the potential benefits of investing in such projects. For this reason, real estate financing is carried out with a strong sense of the need for prudence and risks are shared or reduced by diversifying the investment finance (Squires, 2012).

3.2.6 Urban Regeneration in the USA

3.4.6.1 Urban Regeneration Policy in the USA (California State)

Redevelopment has been popular throughout the USA since the late 1970s and is seen as a vehicle to facilitate real estate investment in targeted areas (Reuschke, 2001).

World War II had a significant impact on the social and economic patterns of American cities, substantially affecting urban development. In the 1940s, many cities changed because of de-industrialisation and an extensive sub-urbanisation move began in American cities. This resulted in a decrease in the

population of city centres. Middle class whites migrated to suburban towns surrounding central cities. State freeway programmes also encouraged a migration towards the suburbs which in turn transformed the character of the inner cities (Reuschke, 2001).

The challenges mentioned have resulted in "new directions in urban management" (Fosler, 1982) which form the basis of public-private partnership activities. Koebel (1989) believes that the public sector must build a relationship with private developers, investors, and speculators, with a view to generating both capital and the political commitment for major urban development projects.

Originally, urban renewal was considered as a housing programme but eventually became one of the most fundamental ways of organising public-private co-operation in the creation of commercial and/or industrial projects in American cities (Eisinger, 1988).For example, in the state of California, local governments were obliged to seek new ways of funding urban development. Consequently many cities began to raise additional revenue by becoming active partners with private real estate developers. The partnership model was created initially by the Carter administration which announced a 'new urban policy' in 1978, which was followed by Reagan's 'New Federalism' which was characterised by substantial federal cut-backs in urban programmes (Reuschke, 2000).

3.2.5.2 Financing Urban Projects USA (State of California)

The financing of urban regeneration projects in the state of California takes place through a combination of city, state/federal and/or developer/owner/users. What follows below is an explanation of some of the main financing mechanisms currently in use in California, especially after the GFC and the subsequent shortage of government funding.

City Financing Mechanism:

Capital Improvement Program

The Capital Improvements Program (CIP) is the long-term plan for all capital improvement projects and funding sources in California. The CIP is a multiple

year forecast of the investment requirements of a city. The advisory committee reviews suggested Capital Improvements Program (CIP) projects from a city-wide viewpoint and offers the Mayor recommendations regarding CIP funds and project prioritisation suggestions. Upon approval of the CIP budget by the Council, the Mayor pursues the completion of each project stage. The Mayor, in addition, employs priority ranking to arrange grant funding opportunities. (GOV.SD, 2013)

Infrastructure Financing Districts (IFDs)

An Infrastructure Financing District (IFD) is a mechanism utilised by redevelopment agencies for funding infra-structure developments. After an IFD is set up, the assessed valuation that existed during the adoption of the district is considered the "base year" for the purposes of working out property taxes. Growth in assessed value and related property taxes, as a result of new development, property transfers, or appreciation above the "base year" assessment, accrues to the IFD as "tax increment" profit. Property taxes due on the assessed valuation up to the "base year" valuations are targeted to taxing entities based on the proportions that would otherwise succeed. An IFD may exist and collect revenues for up to 30 years (Lefcoe & Swenson, 2014).

An IFD can finance the purchase, construction, expansion, improvement, or rehabilitation of the real estate or other physical property with a beneficial life span of approximately fifteen years - or sometimes longer.

Trans NET and Asset Management Funds

San Diego's Trans Net Smart Growth Incentive Program (SGIP) finances the transportation-related infra-structure improvements and planning actions that help smart growth development. The SGIP would finance 2% of the annual Trans Net revenues for the next 40 years to local governments with a competitive grant program to support ventures that can help better synchronize transportation and land use in the San Diego region (sandag.org, 2012). The SGIP attract private developers who involved in development projects in order to make enhancements in the San Diego region.

State/Federal Financing Mechanisms

New Market Tax Credits

US Congress initiated the New Markets Tax Credit Program (NMTC) in 2000, as a way of encouraging investment into real estate in poorer areas. Essentially NMTC enables investors to claim a tax credit for making equity investments in Community Development Entities (CDEs), which promote construction work in low-income areas. Claimed over a period of seven years (three years at 5% followed by four years at 6%) the tax credit eventually accounts for 39% of the investment total – although the investment may not be transformed before the end of the total period (Property metrics June 2017).

Enterprise Zone

Enterprise Zones are geographically designated areas in which businesses can obtain several substantial state tax breaks and other benefits. The businesses operating in Enterprise Zones (EZ) receive tax credits, deductions, and incentives that can significantly reduce the cost of hiring new employees and invest in new equipment. These credits, deductions, and incentives are applicable for ten years (sandiego.gov, 2012).

Developer/Owner/User Financing Mechanism

Business Improvement Districts (BIDs)

The aim of Business Improvement Districts is to support the business-led innovation developments by giving a greater degree of control to local authorities for the delivery and management of services (Berry et al, 2009). BIDs are a revealing case to demonstrate what Theodore, Jamie, & Brenner (2010) call the variegation of neo-liberalism in different contexts. Didier, Morange & Peyroux (2013) explain that property owners living or working in BIDs are obligated to pay an additional charge based on their property values. BIDs are often time-limited and their status will have to be renewed after a specified period (Michel & Stein, 2014). They differ from some other models for city management by being compulsory for all business and property owners within the BID. The intention there is to avoid free-loading as sometimes happens to voluntary schemes, where those who do not contribute to the

financing of the project nevertheless benefit from it (Michel & Stein, 2014).

In considering the role of BIDs in evidence-based policy making, Lloyd and Peel (2008), argue that a growing body of knowledge is producing opportunities to share experiences, transfer understanding and use individual expertise. Consequently, the growing use of BIDs as a policy mechanism can enable benefit from best practice, knowledge transfer and experiential learning; however, the ownership, management and independence of data collection and research analysis are all-important, given the sensitivities which surround service delivery in public realm urban areas. Ratcliffe et al (2004) also consider how this may threaten local accountability and the kind of strategic planning that aims to benefit all groups in society rather than business interests alone.

Mega-Urban Regeneration developments in the UK have become increasingly engaged with new approaches to urban regeneration, including tax-based mechanisms to facilitate local economic development. The deliberations of the Urban Task Force provided a powerful case for putting tax-based measures alongside more conventional land-use planning and town centre management arrangements, in order to secure a more optimal pattern of urban development and regeneration.

Recent research by Berry et al (2010) evaluates the effectiveness of the legislative and pilot BID arrangements operating in the UK on governance, financing and stakeholder engagement. It suggests that the BID model provides a dynamic for engaging with the business community, agreeing accountability for additional service delivery and targeting investment at a local level. The clarity of the BID scheme, certainty on cost, accountability of the BID Company and a business plan which delivers real solutions are all critical to gaining support within the business sector.

Business Improvement Districts (BIDs) are an innovation used in US planning. These are geographic areas, designated by the city authorities, where business owners are assessed annually to fund activities and improvements to promote their individual business districts. US cities see a BID as “a tool for strengthening small business communities, creating new jobs, attracting new businesses and revitalizing older commercial neighbourhoods”

(www.sandiego.gov).

Tax Increment Financing (TIFs)

Tax Increment Financing (TIF) was launched in 1952 as part of Community Redevelopment Law in the USA. This funding method enables redevelopment agencies to acquire and also spend property tax profits from the rise in estimated value which has taken place after adopting a redevelopment project. Figure 3.2 demonstrates the generic TIF Process.

Figure 3.2: A Generic TIF Process (source: Klacik and Nunn, 2001)

Tax Increment Financing is an urban regeneration tool which allows local authorities to borrow money for infra-structure projects secured against the future property tax escalation revenues from the resulting development which essentially allows a local authority to do business with future tax revenues for a present benefit (Briffault, 2010).

TIFs have proven popular because they allow local governments to finance real estate with the support of private investors encouraged by the offer of tax credits, without themselves having to raise taxes. In California, this has enabled the floating of revenue bonds to get around the constraints imposed by Proposition 13 (http://www.lao.ca.gov)

3.2.5.3 Lessons from TIF in the US

TIFs thus provide local governments with a flexible financing tool, allowing them to cut through the bureaucracy often associated with grant programmes. (Davidson, 1987) By using TIF funds to make improvements, this in turn makes the whole area more attractive to external investment, and so land values should increase – sometimes even before any public investment has been made. This in turn encourages private investors to speculate and invest in a TIF area, which is why the TIF is sometimes referred to as a self-financing tool (Weber, 2013). However, TIFs can also have a correspondingly negative impact on neighbouring districts. In the USA, it often happens that country or school districts may share a tax base with the local city, and provide a service to the city's residents, without benefiting from the economic boost that a TIF can offer (Weber, 2013). Johnson and Man (2001) report that misuse of TIF application may result in a dislocation of large numbers of residents and businesses and therefore intensify deprivation. Jolin, Legenza and McDermott (1998), believe that without governmental direct oversight and control mechanisms, existing residents within TIF Districts may be pushed out due to property value escalation and the subsequent increases in property tax bills, rents and housing prices.

In 2011, the State of California opted to end its involvement with TIF despite more than sixty years of a mostly successful experience with this form of investment. As explained above, the current researcher looked particularly at how TIF operated with the CLUDs project in the city of San Diego, and heard a number of arguments as to why TIF had not ultimately proved successful in California. Lessons to be learned included accountability, viability and transparency. This is clear in the much stricter approval and oversight process that is now required.

A summary of the advantages and disadvantages of TIF is presented in Table 3.1, adopted from Calia (1997).

Table 3.1: Principal Advantages and Disadvantages of TIF (Calia 1997)

However, success should not be defined simply in terms of whether or not TIF earnings are adequate to repay the debt, but should incorporate a wider appraisal concentrating on the criteria laid down in the business context including the prospects for improved employment, income creation, financial prosperity, social benefits and physical renovation.

However, much of the progress in the acceptance for TIF did not happen until the mid-1970s, once changes were made in development funding policies, encouraging several cities to consider adopting TIF (Bryne, 2005).

These changes included a decrease in federal funding designed for redevelopment activities, administrative transference of urban policy to reduce the level of government, state-imposed caps on property tax collections and restrictions on the quantity and types of city expenses (BPF, 2008).

3.2.5.4 US–UK Policy Transfer Concepts and Theory

Given the current financial climate, there are increasing calls for a new financial model to overcome these economic difficulties and to unblock investment for MURPs in the UK. Hence, this research includes a consideration of US methods of financing urban projects. The USA has demonstrated in the past that it can offer innovative economic solutions such as TIF and BIDS to European problems. Since the 1960s, UK governments have often adapted US policies to help service urban regeneration, although some observers (see for example Miller and Kraushaar, 1979) suggest that the way that these schemes are governed are altered considerably when they cross the Atlantic. (Squires & Lord, 2012) Such trans-national policy transfers are based on the assumption that successful policies will contain lessons that are more widely applicable to other nations (Peck and Theodore, 2001) and that in the case of the US and the UK, the use of a shared language means that policies and information can be transferred with particular ease. The two countries also share a similar ideology, underpinned by liberal democracy, and a shared history in military ventures – a closeness sometimes referred to as the "special relationship". Other similarities, in terms of their experience of, and attitude to urban decline, means that by studying the US experience, UK planners can adopt experimental policies more rapidly and with greater confidence.

This thesis studied US policies on financing urban regeneration projects in order to determine the most suitable/applicable financing models to be adapted for the UK.

Table 3.2 below exemplifies some policy transfer elements and explanatory features between the US and the UK (Squires and Lord, 2012). Among those adapted from the USA, Business Improvement Districts (BIDs) have been preferred owing to the cost-effective local service delivery in the UK. (SI 2004/2443).

Lessons regarding accountability, viability and transparency have been learned from the American experience of TIF. However, of all issues being considered, it appears that there are no insurmountable reasons that, following the learning process of delivering the pilot projects in Scotland, TIF cannot have a successful future in financing urban regeneration in the UK. Therefore this

innovative funding model is proposed in a number of MURPs in the UK such as for the Nine Elms Project in London.

Table 3.2: Policy Transfer between US and UK (Squires and Lord, 2012)

3.3 Mega-projects as a Pitfall?

This research takes as a starting point Merrow's definition of MURPs as large-scale projects that are risky, complex, with high social impact, and that engage with a diversity of stakeholders (Merrow, 2011). As urban development projects have expanded in size and complexity, they have become more and more difficult to manage and execute. At the same time, many more and larger mega-projects are being offered and constructed, and many of these large infra-structure projects end disastrously for their sponsors. Their cost over-run has often been

so remarkable that the project total NPV becomes negative. Low performance results, in terms of cost over-run, shortfall in demand and forecasted revenue, mean that the very projects intended to become a spark for economic growth instead become a barrier (Flyvbjerg, 2003, 2007). Many reasons have been identified for triggering these failures, but, mainly, they can be summarised as mis-information, a lack of realism on the likely cost and benefit and have a poor risk analysis of the project. The technological impact, environmental factors and market changes are all complicated by loose relations between different partners and stakeholders (Flyvbjerg et al. (2003), Marrewijk, Clegg, Pitsis, & Veenswijk, (2008)). In addition, political issues and the lack of a coherent decision-making strategy boost the complexity and difficulty of managing such projects (Merrow, 2011). When such disastrous results of cost over-run, delay on project delivery and became public, they harm the reputations of the project management team. Merrow (2011) offers five criteria to demonstrate such effectiveness, shown in Table 3.3, which is also a guide as to when failure occurs in mega-projects. If any project has a weaker result than any defined criteria it is considered as a failure, while if a project does not meet any of the criteria for failure, it is considered a success.

Table 3.3 Mega-projects Criteria of Failure (Merrow, 2011)

The results of Merrow's extensive study (2011) reveal the great contrast between successful and failing projects. The 35% of projects that end successfully were truly excellent projects. On average, they consumed their budget at just 2% above their projected cost, with an extraordinary performance in schedule, being only 4% slower than the industry average. By contrast, the failures were calamitous. They recorded an average of 40% cost overrun and a 28% delay on planned execution schedule. Worst of all, by the time of completion they had reached just 60% of the projected production for the first year.

3.3.1 Attributes and Characteristics of Mega-Projects

Despite varied explanations around the cases and contexts of mega-projects, there is no general definition about their characteristics and dedicated attributes which might distinguish them from other types of projects. The two definitions here are intended to explain this scheme:

Frick (2008) identifies the six C's, stating that mega-projects are:

- Colossal in size and scope, whereby there is a great facility development or reconstruction, for example a new infrastructure such as a tunnel, airport, and a bridge or rail system.
- Controversial because of the project size, engineering success and excellence in design.
- Costly.
- Controversial, as project contributors negotiate financing packages, while engineers and designers follow the construction.
- Complex and this generates risk and uncertainty.
- Control-issues-related, with discussion around who makes the key decisions, who executes the project, who are the main stakeholders and who defines the boundaries

The definition by Flyvbjerg (2007) makes the following observations of mega-projects: such projects are inherently risky, the required technology is not routine and this produces uncertainty as well as innovation, decision making and planning are usually multi-actor processes with conflicting tendencies and sometimes the project scope or objectives can change over time. There is sometimes misinformation about costs, benefits, and risks and the output often comes with cost overruns and/or benefit shortfalls

Based on the above definitions, the attributes of megaprojects are summarized in Table 3.4.

Table 3.4: Attributes and Corresponding Challenges of Mega-projects (Source: author 2014)

In summary, it is obvious that the specific characteristics of MURPs show that they have the potential to generate financial problems because of cost overrun, shortfall in demand and/or simply being very costly. A Sustainable Mega Urban Regeneration project seeks affordable, transformation projects with community spatial spinoffs in health, friendliness and social justice.

3.4 Mega Urban Regeneration Projects

During the last decade, the number of Mega-projects in European and American cities has risen dramatically. Throughout the 1990s, major cities have responded to the pressures of the global economy by initiating MURPs that vary in terms of their social outcomes and planning processes. This is based on the level of commitment of each city and their concern for social equity (Fainstein, 2008).

In 2016, almost 55% of the world's population lived in towns or cities, and this is expected to rise to 60% by 2030, by which point around 33% of people are expected to live in cities with at least half a million inhabitants. Recognising and understanding these trends is essential for ensuring sustainable regeneration (esa.un.org, 2017).

As illustrated on Figure (3.3), the share of the population living in cities is projected to increase in all regions.

Figure 3.3: Urban and rural population of the world,
Between 1950 and 2050 (Source: esa.un.org)

While urbanisation endorses economic and social development, at the same time, this progress has its consequences in cities by produce housing shortages and also environmental problems such as biodiversity declines, resource deficiencies and air pollution (Lia et al, 2005). Change in the land use has been proved to leave side effects on the environment, reducing natural resources and affecting people's living conditions. Rezgui (2010) noted that the 21st century has faced significant global ecological challenges by putting the natural and built environment at prospective risks. This includes global climate change, urban sprawl, a depletion of natural resources and an increase in human conflict.

Old (1995) concludes that Mega Urban Projects are one component of the rapid growth of urban areas, where levels of urbanisation have increased because of natural population growth, rural-urban migration, the reclassification (or annexation) of previously 'external' areas, and international migration. He also notes the increasing importance (and indeed primacy) of many cities in economic and cultural terms, showing that the economic restructuring brought about by the deindustrialization of the late twentieth century had brought about moderate (and in some countries rapid) economic growth alongside technological change. All of this has contributed to a rise in demand for MURPs.

As a policy for urban renewal throughout the twentieth century, mega-urban projects have been extensively used to encourage major capital investment in the built environment. They include a variety of use forms comprising mixed-use, housing (with various forms of tenure and size), retail and office space. They are occasionally surrounded by publicly accessible parkland and natural amenities, and are supported by community and cultural facilities. (Lehrer & Laidley, 2008)

Urban regeneration policies have underpinned the application of neoliberal socio-economic policies in diverse dimensions, firstly, by having a critical shifts in domains and levels of intervention, secondly, in the composition and characteristics of actors and agents, thirdly, in institutional structures and finally on policy tools (Moulaert, Rodriguez, & Swyngedow, 2003).The 1980s and 1990s saw the rise of neo-liberal economics, espoused in the UK by the Conservative policies of Margaret Thatcher and her successor, John Major (1979-1997), whose governments became so closely associated with neo-liberalism that the approach is often given the label of Thatcherism. Thatcherism was characterised by minimal government involvement in the market, combined with the promotion of a strong economic individualism. The welfare state was steadily dismantled and (just as in the previous social democratic period) scant attention was paid to the environment. Instead it was believed that wealth generation would have beneficial trickle-down effects to the whole of society. Social problems stemming from inequality thus created were regarded as a necessary evil (Giddens, 2000).

Swyngedouw et al (2002) describe how MURPs have become one of the most distinctive outcomes of neo-liberal urban planning policy. Since they come about as a response to changing market conditions, they normally contain a significant element of intended socio-economic development as part of their physical construction plans. A typical MURP is also intended to lay the groundwork for future economic growth and for transforming the local region (Swyngedouw et al, 2002). In other words, MURP-based strategies play a crucial part in the restructuring taking place as a response to the changing economic climate.

Thornley (1999) shows how globalisation has led to cities competing with each other to attract investment. Taking examples from London, Sydney and Singapore, he shows how MURPs have helped cities rebrand themselves; the economic effectiveness of such ambitious schemes can only be properly judged in the long term if they create a newly enhanced image.

While there have been various explanations for the justification and context of mega urban regeneration projects, as yet there is no general definition about their characteristics and dedicated attributes which might distinguish them from other types of projects. Leherer and Laidley (2008) as shown on Table 3.5 indicate that MURPs share the following attributes:

Table 3.5: Mega Urban Regeneration Terminology (Source: Leherer and Laidley, 2008)

Fainstein (2008) defines these mega-urban projects as follows: they are very large, they involve mixed-used development and they are partly intended to attract multi-national businesses as part of the planning process

For this research, MURPs will be defined as:

1. Large scale, mixed used Urban Regeneration Projects
2. Costing over 1 billion US Dollars
3. Aiming to transform the area in order to attract both people and inward investment

Many mega-projects fail due to their cost over-runs, which Bent Flyvbjerg describes as a Machiavellian formula due to underestimated costs,

overestimated revenues, undervalued environmental impacts and overvalued regional development effects' (Flyvbjerg, 2005).

An ever-increasing number of MURPs are currently being promoted in different countries in Asia, the Middle East, Europe and North America. Mega-projects such as the Palm Islands in Dubai or the Kings Cross urban regeneration in London which was estimated to cost £2bn, whilst the redevelopment of Stratford City starting in 2007 in East London has a £7bn price tag due for completion by 2020. City Centre Development in Las Vegas costing $11bn is the largest privately financed project in the US. This was originally estimated to cost $4bn to develop, although this was pushed up by rising construction costs and design changes. Songdo International City in Seoul, currently under development, is estimated to cost $40bn. All of this implies that there are high stakes for any investor involved with MURPs. Financing of such projects require complex structures with many different players, both public and private. Return on investment is viewed long term, risky and particularly low performance.

3.4.1 Mega-Urban Regeneration as a Risk – the need for an evaluation framework

Cities are confronted with unparalleled internal and external challenges. Cataclysmic events include war, tsunamis, or volcanic eruptions. When the Thera (Santorini) volcano erupted in the second millennium BC, it destroyed Akrotiri, and wiped out Minoan coastal settlements on Crete. In 79AD. Vesuvius buried Pompeii. While they may not have the dramatic impact of pyroclastic flows, disruptive technologies in modern times can leap-frog and undermine incumbent urban industries. Detroit, for example, illustrates how an inadequate strategic response to technological disruption can tip chronically stressed systems into decline. Besides war or acute geological and technology shocks, alterations to trade, culture, migration, rainfall, or climate can all disturb the settlement's status quo (Hall & Hesse, 2013; Hopkins, 2014). The response to catastrophes varies with regime priorities and capabilities. For example, when its Nile tributary silted-up, the entire city of Pi-Ramesses in Egypt was re-located (Bietak, 1981). Apart from dramatic external threats,

constraints or endogenous forces can lead to dystonic urban trajectories and bequeath malignant outcomes, involving congestion or a toxic legacy of unstructured sprawl and pollution (e.g. Delhi in India). Dystonic megacities are characterised by planning complacency, poor management, corruption, or underinvestment in civic and public amenities. Resentment breeds in slums that abut affluent, gated enclaves. Unstructured urbanization spill-overs manifest in poor health, air pollution, traffic congestion, psychologically stunted children, and crime. Such spatial externalities consume 15% of Beijing's GDP and cost the United States economy US$ 400 billion annually (Litman, 2014). Hence, the failure to tackle spatial or market externalities is neither 'smart' nor 'sustainable'.

However, many obstacles block transformational change, notably political disagreement, lack of funding and institutional weakness. Operational challenges include contested information (Bruijn & Leijten, 2008), fraud, cost escalation, or simple oversight (Flyvbjerg et al., 2003a). Obstacles aside, mega-project outcomes can underwhelm, polarise communities, or rapidly depreciate. Mega-projects like Songdo (Korea), Maasdar (UAE), Skolkovo (Russia) or Dongtan (China) have high opportunity costs and are 'unlikely to deliver widespread, lower level Maslovian sustainability' (Wadley, 2010). To deliver this, Güell and Redondo (2012) call for a more tempered approach, involving territorial foresight, debate, local engagement, institutional collaboration, project scrutiny, and smart finance. For Batty (2013), social innovation could resolve the 'smart' technological/grandiose or social/grounded paradox, noting acute shocks, chronic stresses, regime malfunction, and contested futures visions, so that the rationale for the genesis of MURP evaluation framework is clear. It could illuminate pathways for eudemonic empowerment that eschews profligate mega-urban project 'white elephants' or the worst depredations of debilitating laissez-faire.

Furthermore, a balanced assessment of the UK built environment backdrop sits between the extreme narratives but wealth inequality remains troubling. The richest 10% of the population controls 44% of the nation's total wealth. In contrast, the poorest half of the population subsists on 9% of the resources (Lucchino & Morelli, 2012; ONS, 2014). Current UK government urban policy is investment-orientated and growth-focused with somewhat less concern for

authentic community engagement and distributive justice. Policy flux and factional wrangling has left a muddle and a bewildering confusion of policy levers: Local Growth Fund (LGF), available for Local Enterprise Partnerships (LEPs): The Growing Places Fund (GPF); Regional Growth Fund (RGF) Infrastructure Guarantees; Works Loan Board (PWLB); Enterprise Zones (EZs) and the Community Infrastructure Levy (CIL).

The review of UK policy context reveals two opposing optimistic and gloomy narratives, but it also invokes the need for a considered planning mechanism to address invidious aspects of spatial and social malignancy without undermining the rule of law or sparking unintended negative consequences.

3.5 Sustainable Urban Regeneration

According to the World Commission on Environment and Development (WCED) in 1987, the phrase 'sustainable development' is outlined as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). The Sustainable development is, however, defined as "the achievement of a better quality of life through the efficient use of resources, which realises continued social progress while maintaining stable economic growth and caring for the environment" (OGC, 2007).

Author	Definition of Urban Regeneration/Urban Renewal
Zhang et al, 2014	Urban renewal aims at improving the physical, social- economic and ecological aspects of urban areas through various actions including redevelopment, rehabilitation, and heritage preservation
Chan & Yung, 2004	Urban regeneration is also seen as "a comprehensive integration of vision and action aimed at resolving the multi-faceted problems of deprived urban areas to improve their economic, physical, social, and environmental conditions"
Adams & Hastings, 2001	Urban renewal has been regarded as "a sound approach to promoting land values and improving environmental quality"
Roberts, 2000	A comprehensive and integrated vision and action, which aim to tackle urban issues and to achieve leading standard of economic, physical, social and environmental conditions of an area.

Table 3.6: Urban Regeneration Definition

Table 3.6 illustrates different authors' definition for urban renewal, however, it is a term used throughout this chapter interchangeably with urban regeneration.

A key factor in the development of regeneration policy was the notion of sustainability. Regeneration should not provide a quick fix; but should lay the groundwork for robust future development. For this reason, a range of frameworks has been developed with a view to evaluating urban regeneration projects.

Sustainable urban regeneration aims to transform the urban environment by making cities more attractive, safer and more comfortable places to live and work (DCLG, 2009; and Glossop, 2008). It also needs to make social and economic progress and a better quality of life (Office of Government Commerce (OGC), 2007; Sustainable Development Commission (SDC), 2003). The Sustainable Development Commission (SDC, 2003), for example, reports to its readers how difficult it remains for practitioners and public bodies to ensure that urban regeneration work remains sustainable in the long term.

A growing body of research attempts to examine what urban renewal sustainability means in different contexts. In the UK context, sustainability has been explored in a case-based study of the Eastside regeneration of Birmingham, assessed against a weak-strong sustainability continuum (Lombardi, Porter, & Barber, 2010). All approaches to sustainability tend to accept that regeneration has three strands: social, economic, and environmental. Each of these strands must be carefully considered when planning for urban renewal.

Sustainable urban regeneration projects are aimed at producing good-quality housing and improving public living standards (Krieger & Higgins, 2002). It also promotes the rehabilitation of dilapidated buildings (Daniel Chi Wing Ho, 2012) and aims to make better use of a city's existing building stock and land resources. Urban renewal is thus seen as making a significant contribution to regeneration, provided it is made sustainable.

To achieve a better understanding of Sustainable Urban Regeneration and also detect potential gaps in the knowledge, this section discusses the planning sub-system in sustainable urban renewal and the stakeholders and their engagement.

Urban planning involves diverse material elements including land, housing, infrastructure, heritage, and transportation. Urban design serves to address these complex issues for sustainable urban renewal as shown in figure below (3.4) (Zheng et al, 2014).

Figure 3.4: Planning Sub-system in Urban Renewal (source: Zheng et al. 2014)

Land is a major component of Sustainable Urban Renewal and this is considered a form of resource. Flexible re-use of land is now assumed as the key to urban regeneration (Mahtab-uz-Zaman, 2011). Garner (1996) discusses the role of housing in enhancing a city's competitiveness as well as revitalising areas of economic and social exclusion in urban renewal. Infrastructure is another compulsory component of planning consideration for urban renewal. Finally, culture is identified as a curial aspect of urban planning. It is important for planners to consider the role of culture in the betterment of urban regeneration (Tweed and Sunderland, 2007). Urban planning acts to address these complex issues to achieve sustainable urban renewal.

The next section discusses the urban projects success factors and their relationship with sustainability. Figure (3.5) identifies the various stakeholders involved and illustrates how they contribute to the operation mechanism in urban renewal.

Figure 3.5: Social Sub-system in Urban Renewal, (source: H.W. Zheng et al. 2014)

3.5.1 Urban Project Success Factors

Urban regeneration at the three stages of policy, process and implementation is greatly influenced by the relationship between the different stakeholders and the characteristics of different partnership modes, as well as the power, mechanism, and operation of different agents. Different stakeholders may guide sustainability in different situations. It is possible that in some development projects planners take a lead and have the final call, while under some circumstances it may be the investors or developers. These stakeholders, however, do not have equal rights and powers in the regeneration practice. Therefore, the findings of this study suggest that the performance evaluation of construction projects is shifting from the conventional measures of cost, time, and quality towards a combination of both quantitative and qualitative measures. This study has attempted to capture the perception of MURP stakeholders concerning a combination of different quantitative and qualitative sustainability indicators.

Extensive research has been conducted in the literature about the success factors of Urban Regeneration Projects (Table 3.8). The review of the literature suggests that there is a consensus that project success can be defined and measured where projects meet a combination of budgetary, timetable and

technical specifications. Meeting stakeholders' expectations and needs and attaining the project business goals are also becoming more important as the expansion of success measurement encompasses overall project success. However, the social and economic aspects of the project have attracted less attention in the past.

Findings from the literature into the success criteria as shown in Table 3.7 assume that the main criteria for success involves the so-called golden triangle of time, budget and required quality. However, the issue of project success proved far more complex than this, since other criteria can be identified – and they are often mutually competing. Not only are there many criteria to be considered, but there are also a wide range of stakeholders who will each have their own views on how progress should be made and judged. Research suggests that it would be impossible to produce a single universal checklist that would measure the success of all such projects. Success criteria will inevitably differ depending on context – the size, the complexity or even the uniqueness of the project, for example.

Authors	Success factors
1. Savindo (1992)	• Expectation of participants (owner, planner, engineer, and contractor or operator)
2. Freeman and Beale (1992)	• Technical performance • Efficiency of execution • Managerial and organizational implications • Personal growth • Manufacturer's ability • Business performance
3. Turner (1993)	• The facility is produced to specification within budget and on time • The project provides a satisfactory benefit to the owner • The project achieves its stated business purpose • The project meets pre-stated objectives to produce the facility • The project satisfies the needs of project team and supporters • The project satisfies the needs of users • The project satisfies the needs of stakeholders • In addition to the conventional measures of cost, time, quality, and scope
4. Munns and Bjeirmi (1996)	A project can be considered successful • When it is able to achieve some specific objectives; • Have definite start and end dates; • Is completed within a specified time period • Is according to a set specification
5. Atkinson (1999)	Performance measurement in construction project has been dominated by the conventional measures of 'iron triangle'; • Time • Cost • Quality
6. Westerveld (2003)	Emphasizes the following KPIs: • Client's appreciation • Project personnel appreciation • Users' appreciation • Contracting partners' appreciation • finally stakeholders' appreciation
7. Cox et al. (2003)	Quantitative performance indicators • Unit/MH, $/unit, cost, on time, resource management, quality control, % complete, earned man-hour, lost time accounting, and punch list. Most of these measures also appear in the estimating/costing systems utilized by the majority of construction firms Qualitative performance indicators • Safety, turn-over, absenteeism, and motivation However, Cox et al. (2003) also acknowledge that qualitative indicators are not considered as highly reliable performance and productivity evaluation tools due to their perceived difficulty and/or inability to be measured.
8. Sohail and Baldwin (2004)	Sohail and Baldwin (2004) offer 67 performance indicators • General indicators (Such as 'number of disputes' or 'incidences of delay in the supply of materials, and tools and plant'), time indicators, cost indicators, quality indicators, indicators for inter-organizational cooperation and partnership • Socio-economic indicators (Such as enterprise development, poverty alleviation, and empowerment).
9. Nguyen et al. (2004)	Support the traditional perspective that a construction project is successful when • It is completed on time • Within budget • In accordance with specifications and to stakeholders' satisfaction
10. Phua (2004)	Project success can be defined and measured where project meet combination of 1. Budget 2. Timetable 3. Technical specifications

Table 3.7: Summary of the Research on Project Success Criteria (source: author 2013)

11. Lesley Hemphill 2004	• Economy and work • Resource use • Buildings and land use • Transport and mobility • Community benefits	
12. Low and Chuan (2006)	The expansion of success measurement is towards project management success or product success or both.	
13. G. Christopher Wedding (2007)	• Balanced perspective • Addresses key goals • Clear and straightforward • Accounts for site variability • Can serve as useful evaluation tool • Adequate mix of quantitative and qualitative • Can serve as useful planning tool • Environment-health • Financial • Livability • Social-economic	
14. Toor and Ogunlana (2008)	Process domain • Project objectives • Devising an adequate project management system • Delivery of product during input, process, and outcome stages, Corresponding Performance domain • Performance goals • Establishment of performance enhancement strategy • Performance measurement during input, process and outcome stages, Corresponding Establishing KPIs, which offer objective criteria to measure the success of a project, can carry out performance measurement.	
15. Shamas-ur-Rehman Toor a. 2009	Key performance indicator • On time • Under budget • Safety • Meets specifications • Efficiently (use of resources) • Doing the right thing (effectiveness) • Free from defects (high quality of workmanship) • Conforms to stakeholders' expectations • Minimized construction aggravation, disputes, and conflicts	
16. Nessa Winston (2009)	Land	Sustainable land-use planning 1- Resisting scattered settlements (brown field over green field) 2- Within mixed use development 3- Close to good public transport
	Construction & design	Higher residential densities • Sustainable construction (e.g. energy efficiency, local renewable materials) • Design for sustainable use (e.g. energy use, water recycling & treatment, waste recycling) • Housing quality • Access to green space • Attractive, clean & safe residential environment • Housing affordability • Tenure mix & social mix • Social resources
	Use	• High standards of energy efficiency in use of dwellings • Waste recycling • Sustainable management & maintenance
	Regeneration	• All of the above & Emphasis on renovation rather then demolition • Partnership with residents • Social supports for vulnerable households

Table 3.7: Summary of the Research on Project Success Criteria (source: author 2013)

Along with the importance of project success, however, sustainability is one of the most important challenges of the present time. Sustainability has more recently also been linked to project management. A particular way of thinking

about this connection is that sustainability needs change and projects are realising change. Silvius (2016) studied the relation between project success and the sustainability and concluded that the most positive relationships are that the stakeholders of the project are satisfied, the project prepares the organization for the future, the project is executed in a controlled manner, the project's deliverable is 'fit for purpose and that the business objectives or goals of the project are realized.

The OMEGA Centre for Mega-Projects in Transport and Development (OMEGA) is studying different aspects of the planning, appraisal and delivery of Mega Transport Projects (MTPs) globally. OMEGA conducted a five-years of international research, investigating 30 case studies of decision-making in the planning, appraisal and delivery of mega-projects among ten developed countries in Europe, the USA, and Asia-Pacific. The particular focus of the project was on Mega Transport Projects (MTPs), examining success factors of each project success in proving an agent of change in wider regeneration, as well as whether the projects were able to achieve the so-called "Iron Triangle" of being completed on time, on budget and to specification. As might be expected, the question of what constitutes a successful MTP proved not an easy one to answer. Different case studies threw up diverse problems and solutions, but a common theme was how well risk, complexity and uncertainty are understood in the planning and decision-making processes. OMEGA, in fact, argued that looking for a simple definition of success of a MTP is both misleading and can even lead to further risk and uncertainty.

OMEGA research shows that the iron triangle represents only one aspect of the success of such mega-projects. Wider considerations must be studied if the impact of the project is to be more widely understood; therefore it calls for a more holistic approach to the planning of MTPs and similar mega-projects (Figure 3.6). The next section discusses social sub-system in urban renewal.

Figure 3.6: OMEGA Project Summary (source: omegacentre.bartlett.ucl.ac.uk, 2014)

3.6 Mega-Urban Regeneration Projects Evaluation

The model of sustainability can be differently perceived depending on the viewpoint taken by the observer; for example depending on whether their disciplines has a focus on social issues, technology, energy or policy.

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Figure 3.7: Three Pillar Sustainability Models, (source: Fazia Ali-Toudert (2017). These are referred to in [1] Spindler (2011); [2] Costanza and Wainger (1991), Neumayer (1999); [3] Kleine (2009), Spindler (2011); [4] Bott and Grassl (2013); [5] Munasinghe (1993); [6] Augenbroe and Pearce (2010)

F. Ali-Toudert illustrates a schematic summary of two recurrent models from the literature in figure (3.7), the three pillar model and (3.8), the four pillar model.

Fig 3.8: Four Pillar Sustainability Models, (source: Fazia Ali-Toudert (2017). These are referred to [7] Spindler, 2011; [8] Stoke (2008), Thwink, (2016); [9] Spangenberg (1997), Valentin and Spangenberg (2000), Lozano (2008); [10] NZMCH (2006); [11] Hawkes (2001), Duxbury and Gillette (2007), Higgins (2015) and [12] Curwell et al., 2007.)

Figure (3.7) and (3.8) shows two sustainablity models frequently referred to in the literature. In Figure (3.7) sustainable development is represented as a 3-pillar model (see [1]–[6] in Figure (3.7)), which takes together environmental, economic and social scopes.

In Figure (3.7), Model [1] three pillars of environment, economy and social are considered moderately independent of each other, and the basis for sustainability of this model considers the sub-themes as stand-alone with little or no interaction between the elements (Ali-Toudert, 2017). This viewpoint is widely debated because of the lack of consideration of interdependences between the elements. Model [2] highlights a graded difference from Model [1] where economy is surrounded by social activities, both of which are bounded

in the environmental component. In Model [3] the three components are reflected to interact with each other and the relationship between them leads to have a shared sustainability purpose expressed by viability and equity. Model [4] considers efficiency, sufficiency and consistency as performance goals in achieving sustainability. Model [5] similarly considers interactions between the three main topics of sustainability. Model [6] the components shift away from the old paradigms, reflect a balanced consideration of time, cost and quality towards a new qualitative pattern directed towards human satisfaction, reduced consumption and minimal environmental impact.

In Figure (3.8) sustainable development is represented as a 4 component model (see [7] – [12]) in which culture is considered as an element to understand human dimensions and governance and an intitutional element is an additional dimension to the 3-pillar model discussed earlier. In models [7], [10] and [11] the element of culture is added to the economic, social and environmental factors. Finally, in models [8], [9] and [12] "Governance component project the importance of managerial and decision-making factors ensuring sustainability of a development, as well as commencing policy and institutional responsibility as another critical factor(Ali-Toudert, 2017).

3.6.1 National Rating Systems in the UK

A city must have high interaction with its adjacent ecosystem therefore to achieve a sustainable urban city it is imperative to burden on ecosystems at the same time as enhancing the quality of life (Alberti, 1996). Sustainability indicators are considered as a proven method for the establishment of sustainable urban development. These sustainability indicators offer a handy and flexible tool for evaluation of sustainable cities and integrated urban development in line with Europe 2020 strategies (Gabi Spitz, 2016). BREEAM, LEED for Neighbourhood Development, EU Sustainable Development Indicators, Green Star and New Urban District are some of the common national rating systems applied in the UK, which will be briefly introduced.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

The National Policy Framework comes up with the Government's planning policies for England and the way these ought to be applied. It sets out a framework for the plans which have been prepared locally for housing and development schemes to follow. The purpose of the NPPF is to contribute to the achievement of sustainable development which needs to be pursued in mutually supportive ways by meeting the three over-arching objectives of economic, social and environmental. The NPPF framework covers a wide spectrum; however, it misses the objectives relating to financing and also has not considered the importance of having a smart governance on achieving a sustainable development. According to The Royal Town Planning Institute (RTPI) "NPPF misses opportunities to improve sustainable development patterns".

BREEAM

Launched in 1990, BREEAM has become the world's most widely accepted standard for assessing the sustainability of buildings and large projects. It was intended to be used as a tool for investors, designers, and other practitioners to ensure the sustainability of construction projects. There are now more than half a million BREEAM certified projects around the world, with almost two and a half million BREEAM certified buildings. The cost of raising building standards to the level of BREEAM certification needs to be balanced against the benefit of ensuring lasting sustainable development.

LEED for Neighbourhood Development

Leadership in Energy and Environmental Design for Neighbourhood Development (LEED-ND) is a sustainability accreditation for neighbourhoods and small communities. It builds on the LEED sustainability certification for buildings, which originated in the USA and aims to reduce commuting, creating local jobs and amenities, and endorse urban realm and green construction.
(https://www.nrdc.org/cities/smartgrowth/files/citizens_guide_LEED-ND.pdf.)

EU Sustainable Development Indicators

The EU Sustainable Development Indicators are set to be used by Eurostat for the two-yearly monitoring of the sustainability appraisal at EU and national level. These indicators disclose a general picture of the European Union progress towards achieving sustainable development objectives strategy (http://ec.europa.eu/eurostat/web/sdi/indicators).

Green Star

Green Star is introduced mainly as an instrument for scoring the energy effectiveness of existing buildings. Green Star originated in Australia then was practised in other countries (M. Pacetti, 2012).

New Urban District

New Urban Districts aim to comply with the DGNB - a global benchmark for sustainability-philosophy, going well beyond the traditional three pillar approach, and looking at all aspects that will make a district sustainable, including environmental, economic, sociocultural and technical perspectives, among others. DGNB is not aimed at individual buildings but rather at whole areas or districts. Site quality is seen as particularly important (Dgnb-system.de, 2016).

As explained, there are different types of evaluation frameworks for sustainability appraisal of urban projects, each of which focuses on a number of disciplines. However, there is a gap in the literature regarding an evaluation framework specifically for MURPs in the UK. In other words, the current increase in the number of MURPs both in the UK and worldwide means that there is a need to develop an evaluation framework which is comprehensive and can cover all ecological, social and commercial considerations, and which is also appropriate for the distinctive purposes of MURPs.

3.7 Sustainable Mega-Urban Regeneration Projects

“Where there is space, there is being” as stated by Lefebvre (1974); this concept embraces the notion of space as a “mental” thing capable of absorbing countless meanings according to the analyst’s whim.

Unlike in capitalism, smart urban development is accountable, people-focused, and conserves natural systems (Thomas, 2000). Smart collaborative institutions negotiate or muddle through (Lindblom, 1959) but avoid the quagmire of strategic drift. Integrity, foresight, and competence enable them to screen, plan and execute quality projects for urban resilience or enterprise. Resilient settlements can better absorb disturbance or reorganise to retain function, structure, and identity (Forbes & et al., 2009; Holling, (1973). Redundancy and a balance of social, economic, and environmental capital strengthen it (Wilson, 2014). Just as genetic predisposition, trauma exposure, or informed treatment engender psychological resilience (Rutter, 1985) so too, urban resilience invokes planning (smart institutions), selective regeneration (quality projects) and system upgrade funding (von Braun & Thorat, 2014). Smart institutions employ competent and co-operative staff to generate a useful output with positive social and ecological spill-overs (Rogers, 2012; Turner, 2014). Productivity gains come without energy or carbon intensification. Rather, efficiency gains come from distributed energy, transport, and information networks.

A smart response to multiple urban challenges begins with the articulation of purpose (to engineer resilience or foster creativity). The next step is to collect useful intelligence to understand places (Floater et al., 2014) and to celebrate their distinctive historicity, heritage, or landscape. Informed spatial transformations (out- comes) rely on science or architectural and design excellence but need grounded urban intelligence. Archival research, baseline analysis, expert views, and structured stakeholder engagement help understand place character.

Moreover, strategic leadership, governance, and institutional architecture all help ensure effective, efficient, inclusive, and transparent project management. They balance strategic foresight and ‘top down’ leadership (Hemphill, Berry, & McGreal, 2004) with local dialogue. Governance ensures the legitimate and cost-effective delivery of complex projects (Termeer, Dewulf, & van Lieshout, 2010). It comprises the formal policies, procedures, and informal culture and norms to focus corporate activity and attenuate agency problems (corruption, nepotism or ‘free-riding’).

Tight governance, financial transparency, and proper tendering all help to cut waste and root out corruption or nepotism. This increases competition and broadens private participation in critical infra-structure. Its antithesis is 'patrimony', oligopolistic free riding, and plutocratic dystopia (Piketty, 2014). Brazil's World Cup stadium construction projects failed to pass muster against the subsidiarity, spatial justice and transparency criteria, but even in tight institutional settings, misconstrued purpose, project complexity or market turbulence can all scupper performance (Altshule & Luberoff, 2003; Flyvbjerg et al., 2003a; Van Marrewijk, Clegg, Pitsis, & Veenswijk, 2008). Flyvbjerg, Holm, and Buhl (2003b) found that nine out of ten projects went over-budget with typical cost blow-outs of around one third.

Ekstrom and Young (2009) note that misfit tends to occur when institutional arrangements ignore ecosystem character, function and dynamics. Spatially, cross-scale misfit occurs where anthropogenic administrative or organisational boundaries diverge from bio-geophysical ones. Institutional constraints include skills, technology, finance, vested interests, collaborative silos, spatial data, and community alienation or fragmentation (Talon, 2010). Human-scaled community needs to be compact and diverse in itself and embedded in a green, natural environment (Fishman, 1977; Howard, 1998).

Urban regeneration quality considerations are multi-faceted but include architecture, design, and the public realm, or connective infra-structure such as sky trains or rail tunnels for compact or connected cities (Floater et al., 2014). The rapidly evolving global economy accentuates stakeholder tensions. The demise of Deepdene Palazzo and its demolition in 1967 to make way for drab offices in Dorking provides a salutatory example of crass commercial land transformation, bereft of local place sensitivity and without national policy coherence (Jakobsen & Høvig, 2014; Robinson, 2012). Even sophisticated hedonistic models which isolate interior, exterior or urban-scale quality design components that add commercial value would not prevent such planning mistakes (Nase, Berry, & Adair, 2013).

The current commodified fiscal regime can sometimes undermine forward-thinking investments such as Transport Orientated Developments (TOD) or canal restoration projects with land amalgamation or complex planning, geo-technical and construction issues (Searle, Darchen, & Huston, 2014). Hence,

political and business cycles, public finances, or market conditions can all shape or constrain transformation viability. However, whilst commercial or subsidised viability is necessary, it is not the sole consideration for smart MURP (Brookes, 2013; Vanolo, 2014). One innovative source of finance is to capture the uplift in development land values, created by train, ferry, or street construction/beautification. The mechanism can be either direct (lease charges or infra-structure connection fees) or indirect, via higher tax. To tax the increments of increased land value, it is important to first designate the beneficial, value-capture project hinterland and then to assign collection rights to the project proponent, usually via a special purpose vehicle (SPV). The SPV clarifies project ownership, allocates responsibilities, costs risks, and orchestrates construction. The associated funding model structures stakeholder rights, conditions, disbursements and repayment profiles and firms-up proponent relative risk profiles. To assess their risk exposure, investors scrutinise projects, examining SPV capability and funding credibility, site position, land amalgamation, project marketability, and government support. Theoretically, due-diligence should weed out bad urban infrastructure projects, situated in unpromising sites with fanciful business models or weak government support. In practice, projects like the Edinburgh tram system are often delayed or over-budget (Easley & O'Hara, 2004). Sustainable MURPs depend on credible corporate structures, strong public–private alliances, a sound geographic context, and financial credibility. Disruptive alternative financing technologies involving crowd-funding or digital currencies such as Bitcoin, could revolutionise the sector.

The private sector will only fund commercially viable urban regeneration, so that investors can eventually recoup project outlays while at the same time being adequately compensated in the interim for the risks assumed. Compensation for risk reflects the opportunity cost of foregoing alternative investments. In the public arena, positive public-realm or social improvement 'spill-overs' can compensate for financial deficit. Where substantive public realm investment is necessary, a public–private partnership (PPP) can help (Pattberg & Widerberg, 2014) but private investors seek payback assurance and competitive returns for risk, in line with targets, assessment criteria, timescales and objectives (Adair et al., 2007). General tax levies aside, investor payback

relies on the capture or internalisation of dispersed spatial benefits to generate commercial revenue streams for the PPP. Alternatively, Social Impact Bonds (SIB) can raise finance (Finance for Good, 2014). In the SIB model, bondholders, rather than taxpayers, initially bear the risk of defraying public disbursements. The SIB commissioning body (government) only pays once auditors have confirmed the agreed social or environmental milestones.

Tax Increment Financing (TIF) provides another mechanism to capture ex-post project benefit streams. Within TIF zones, recuperation of public real betterment costs is excised from local government and outsourced to the proponent himself. Infrastructure-induced property capital gains are ring fenced to offset some of the initial upfront disbursements. In practice, TIF means the local authority effectively cedes elements of its fiscal sovereignty to the proponent.

Given collaboration complexity and repayment risk, Sustainable MURPs must balance hegemonic idealism with self-determination, legal tradition, and policy settings. Public and ecological considerations temper commercial ones. Risk diagnostics inform the evaluation of its multiple success criteria. Whilst ideally smart MURP management culture is administrative and collaborative, rather than exploitative or individualistic, it still relies on investment and policy clarity, sound financing and risk mitigation (Adair, Berry, McGreal, Dennis, & Hirst, 2000). Extensive information must be harvested on proponent capabilities (partnership institutionalisation, management, and solvency), project design, and capital market cyclical situation and space market prospects (planning regime, lease rates, and sales margins). Subsequently, risk analytics screen out 'noise,' integrate and structure data to tailor financial projections, ascertain option values, estimate terminal yields, and fine-tune capitalisation rates. Funding refinements sharpen information fields and make risk assessment more precise. Smart funding strategies can either be internally-focused, such as multi-asset class factor models, or externally-oriented to cut information asymmetry (Diamond & Verrecchia, 1991). In the latter vein a 'smart beta' strategy scans for under-rated proponents/projects with a stronger service debt capacity, higher returns or lower volatility prospects than conventional financial metrics would suggest. Popular industry risk and performance diagnostics include RiskMetrics; IPD real estate information;

MSCI ESG (environmental, social and governance); and ISS corporate governance research.

Given the stark distributional backdrop, 'smart' development must address, if not allocate minutia, then it must at least address the broad procedural mechanics for an inclusive society without compromising enterprise. Practically, Sustainable MURPs sidestep pedantic semantic quarrels over 'sustainability' or statistical indicators for it, and instead back catalyst projects for 'high-quality city-based lifestyles with low carbon-based mobility' (Banister, 2012). In this regard, pedestrian or dedicated cycle networks would pass muster (Southworth, 2005).

Project	**'Hard'/tangible investment**	**'Soft'/tangible investment**
Bordeaux Bordeaux Métropole Aménagement (France 1995–2007)	Waterfront development Housing construction Public realm upgrades Tram system	Youth training heritage management
Paris Promenade Plantée (France 2000)	Elevated causeway and park	Access to Bastille Opera
Madrid Rio Manzanares (Spain 2006 a 2011)	Riverfront remediation of Central 8 km green space, foot-bridges, and cycle routes	Public plaza Job access to CBD
San Francisco, Embarcadero (USA 1991)	Demolition of ugly freeway Construction of palm-lined boulevard, squares and plazas	Waterfront promenade New retail in public plaza
Bogotá Juan Amarillo (Colombia 1990s	45 km of greenway and 300 km bike lanes Mass-transit system	Job access to downtown
Seoul Cheonggyecheon (South Korea 2003–2005)	Reclaimed river frontage Upgrades to local retail	Enhanced public transit Pedestrian park amenity

Table 3.8: Urban Regeneration Projects

Table 3.8 provides some global regeneration examples, which enhance 'hard' infra-structure (built environment and transport logistics) but also address 'soft' institutional and spatial justice dimensions. Strategically diminished development undermines innovation capacity. Inequity, corruption, and poor governance are its hallmarks. In contrast, smart remedies involve strategic leadership, organisational fit, IT connectivity, and local up-skilling (Colantonio & Dixon, 2010; Couch, 1990). For Roberts (2000), sustainable regeneration means realising a comprehensive vision which creates 'lasting improvement in

the economic, physical social and environmental conditions of an area.' 'Urban regeneration,' like its utopian Garden Cities precedents (Howard, 1902), extends beyond narrow economic development or physical 'urban renewal.' Its approximate pragmatic physical, economic, or environ- mental upgrades improve the daily lives of ordinary people. Within financial constraints and realistic limits, sustainable regeneration improves places, stimulates prosperity, and fosters inclusive local capabilities. For Turok (1992: 361), unrestrained market-led development fails to consider local residents or the underlying local economy and 'may have detrimental consequences for the economic fabric of cities and for the quality of life of their residents.' regeneration objectives split into 'hard'/tangible and 'soft'/intangible ones:

- 'Hard' place and infrastructure upgrades (buildings, precincts, facilities, technology and logistics).
- 'Soft' intangible investments to improve the environment (emissions control, remediation) or develop human capital (job creation, health programs, education and skills training, cultural activity, service provision).

The sample of international regeneration projects substantiates the imperative for an evaluation tool to help navigate complexity, build consensus and overcome policy flux.

3.8 Conclusions

This chapter provided an assessment of the literature on Mega Urban Regeneration Projects, the evaluation models for sustainable urban projects along with identifying relevant theories used to analyse sustainable urban development. It concludes that there is a need for a model/framework for the evaluation of MURPs which will be discussed further in Chapter Five.

The literature explains that while there is no universal or standard definition for the term "Mega Urban Regeneration projects", these projects are defined as programmes that integrate very large, mixed used urban regeneration

developments, and are intended to attract multi-national businesses into the planning process

The chapter further explored urban regeneration and development policies in the UK. It looked at how the implementation of neo-liberal socio-economic policies led to critical shifts in the way that urban planning in the UK has been organised.

Urban regeneration in the USA was also discussed briefly, since in an era where increasing expectations are placed on government finances and public service provision, it would seem useful to look at new financial models such as TIF and DIBDs as used in the USA, to overcome these economic difficulties and to unblock investment for MURPs in the UK.

Different evaluation models have been illustrated above, confirming that there is a gap in the knowledge for a robust evaluation model for MURPs. Hence the aim of this thesis is to propose a screening tool to evaluate MURPs, as will be explained more extensively in Chapter Five.

Sustainable MURPs help to overcome short-term vested interests and help focus stakeholders on long-term urban transformation goals which helps to galvanise finance. Such large projects depend upon foresight, integrity, institutional fit, local consultation, design ingenuity, construction expertise, and financial acumen. Sustainable transformative goals involve improving connectivity, productivity, protecting or enhancing ecologies and building resilience. The following chapter will outline the methodological approach used for this thesis.

4| Methodology

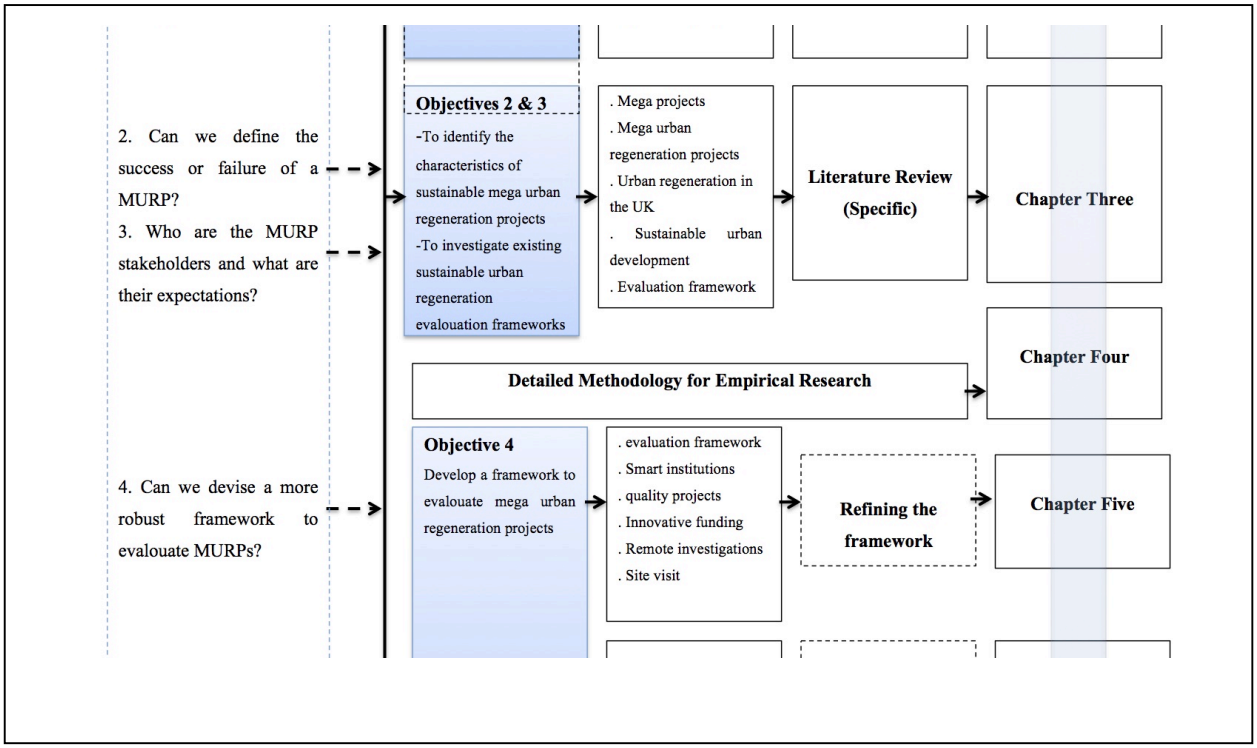


Figure 4.1: Thesis Structure (respective objective, methodology and chapter structure)

Chapter 4: Research Methodology

4.1 Introduction

This chapter outlines the research design and methodology. It defines the institutional theory and applies theoretical and methodological guidelines on comparative study to generate a MURP evaluation model. Institutional theory is used to inform the case study selection and analysis.

The previous chapter found that a robust answer to the main research question – Can we devise a more robust model to assess MURPs? Chapter Three calls for a structured approach in order to gather sufficient credible evidence. Here in Chapter 4, the thesis outlines the mixed methodology adopted. The theoretical element contextualizes the formative structure and governance models of MURPs within an urban regeneration context. The empirical element relies on qualitative data collected in three case studies, and on semi-structured interviews involving key actors and stakeholders in policymaking, financing and implementation of MURPs in the UK. Within the empirical element, a qualitative approach is adopted which focuses on the evaluation of such projects.

4.2 Research Philosophy

This research is focused on mega-urban regeneration projects and so inevitably adopts a pragmatic research approach. Nevertheless, the ontological position also acknowledges constructivism or interpretation of sense data by different project end-users so the thesis epistemological position has an interpretive slant in an overall qualitative research philosophy.

Urban regeneration is a process of transformation of designated and often inner city areas that involve the coalition of a number of actors and agents comprising investors, developers, financiers, national and local governments, as well as volunteering and community stakeholders. The study examines the institutional framework and the way in which key stakeholders operate in the production of the built environment.

Creswell (2003) considers research philosophy as the method and general guidelines considered in the adoption of research. He also explains that

research philosophy is a method of analysing the phenomena of procedures, rules, and propositions implied by an order; moreover, Creswell suggests that research philosophy can be implemented within a subject or a field as it studies methods in a systematic way. Gray (2009) and Crotty (1998) explain that an inter-relationship exists between a philosophical stance adopted by a researcher, the methodology and methods used, and the researcher's view of the problem identified. Hence, an explanation of the methodology starts with philosophical persuasions, such as ontology and epistemology; this then leads to methodology and methods.

4.3 Research Approach

David and Sutton (2004) argue that physical research is based on experimental methods while social research shapes a framework based on the collected data. Moreover, social research tries to conceptualise phenomena in order to develop general theories to explain regular events (David and Sutton, 2004). In this context, controlled conditions are established to measure the effect of variables on each other.

Saunders suggest that a deductive approach is considered when an existing theory is used to shape the approach that is adopted to the qualitative research process and to aspects of data analysis (Saunders, Lewis, & Thornhill , 2009). Whilst the kind of method that defines a framework based on collected data is called the ‘induction’ exploration-based method (David and Sutton, 2004). In this type of approach, a researcher develops a conceptual framework or concepts of the research by observing the regular events of the real world. Creswell (2003) argues that in the inductive approach, the eventual point of a research is theory and is formed by being based on theory.

My research acknowledges the distinction between inductive and deductive approaches but uses aspects of both approaches in its different phases. Initially, the most appropriate path for this research is a deductive route, top down method; to generate a draft framework to reflect key notions and measurable indicators to assess mega-urban regeneration projects. Later, the thesis used the inductive approach during subsequent qualitative probing to investigate the complex institutional, structural and cultural factors at play to

gain a more nuanced insight; this takes account of different organisational structures, cultures and institutions and variable local conditions.

4.4 Research Strategy

There are three methods of data collection delineated namely quantitative, qualitative and mixed methods. The quantitative research approach deals with a large amount of data sets and generates quantifiable information (Bryman, 1988), whereas the qualitative approach is more descriptive and is about explanation of insights, attitudes, opinions and perspectives (Hakim, 2000). David and Sutton (2004) note the following as the main differences between the qualitative and quantitative research approaches: the first and most obvious difference is between numbers and meanings; the second between deduction and induction (as quantitative studies are more related to a deductive approach and qualitative studies to inductive approaches); the third between objectivism and constructionism or phenomenology and the last between generality and depth validity.

While the qualitative approach explores and understands the meaning individuals or a group ascribe to a social or human problem, a quantitative approach tests objective theory by examining the relationship among variables (Creswell, 2013).

Creswell (2003) discussed that a mixed method approach that combines both qualitative and quantitative approaches, employs practices of qualitative and quantitative approaches together. Moreover, as Creswell suggests using the mixed method approach also helps to present visual pictures of procedures as well as to integrate data at different stages (Creswell, 2003).

Table 4.1: Fundamental Differences between Quantitative and Qualitative Approach (Source: Bryman, 2008)

4.4.1 The Adopted Research Strategy

As discussed earlier, the thesis adopts a pragmatic approach so its initial scientific objective stand is subsequently nuanced by some selected constructivism and interpretivism. The four main reasons for this selection is as follows: firstly, because this research is focused on the development processes of mega-urban regeneration projects and it tries to explore the experience, as well as the backgrounds, of stake holders that are involved within these processes. It is noted that the examination of multiple realities that are part of subjective knowledge is only allowed in qualitative research approaches (Al-Otaibi, 2010). Secondly, due to the complex nature of mega-projects, there is not sufficient data available within the existing context; moreover the number of stakeholders involved in such projects is not clear as mega-projects are considered as a new phenomenon. Thus the use of qualitative methods was very important for this research as it helped the researcher to make sense of the complexity that existed in the stakeholder's relationship. In addition, the use of qualitative approaches was beneficial for the current study as it gave deeper insights and provided a platform for the researcher to understand the attitudes and behaviour of stakeholders. Thirdly, in order to understand and investigate the complexity of structural, institutional and cultural factors, this thesis concentrated on to the challenges of mega-projects from an academic as well as a company perspective. Fourthly, this research is not involved with testing or creating a hypothesis or theory, which as Bryman (2008 cited in Al-Otaibi, 2010) suggests is associated with the quantitative research approaches. Thus the current study has used qualitative methods.

4.4.2 Triangulation

Triangulation method is about combining of approaches. For study of social phenomena, triangulation uses more than one source of data or methods (Bryman, 2008), the combination of quantitative and qualitative approaches as Baumard and Ibert (Al-Otaibi, 2010) discuss is a practical method for many researchers to proceed. 'This method involves combining the two approaches simultaneously in order to gain advantage from their respective qualities' (Al-Otaibi, 2010). By adopting and combining both qualitative and quantitative

approaches, clear insight and results can be obtained which would help to draw conclusions, as illustrated in Figure 4.2.

Figure 4.2 Triangulation of Quantitative and Qualitative Data (Fellows and Liu 2008)

Juliet and Anselm (2008) as well as Denzin and Lincoln (1994) support this method by commenting that data triangulation from multiple sources and techniques is important for the verification and validation of qualitative analysis.

Denzin (1984) outlines four types of triangulation: Data source triangulation - when the researcher looks for the data to remain the same in different contexts; the use of a variety of data sources such as interviews, observational data and archival materials. Investigator triangulation - when several researchers examine the same phenomenon in order to achieve agreement. Theory triangulation - when researchers with different viewpoints interpret a single set of data and methodological triangulation- when one approach is followed by another, to increase confidence in the interpretation - for example, combining quantitative and qualitative approaches in a single study.

This research will employ a qualitative approach that will involve a literature review, semi-structured interviews and the use of multiple case studies, therefore, data triangulation and methodological triangulation is going to be used. (Figure 4.3)

Figure 4.3: Triangulation of quantitative and qualitative data (Fellows and Liu 2008)

4.5 Research Design

Table 4.2.indicates characteristics of research strategies. Under the definition of research approach, there are a number of research methods that could be taken by researchers in addressing questions namely as experiment; survey; action research and case study.

Table 4.2: Research Strategies versus Characteristics (Source: Yin 2013)

As a research strategy, Saunders et al (2012) argue that the case study method is suited for research which is intended to gain a rich understanding of the context. This is commonly used in response to the questions ‘why’, ‘what’ and ‘how’. Yin (2008), categorizes case studies based into two different dimensions: number of cases and units of analysis. The number of cases classifies case studies into single or multiple cases while units of analysis distinguish holistic cases from embedded cases. This research will implement multiple case studies, since the issues need to be addressed in different

contexts. Three case studies have been selected for this research in the UK in order to gain a rich understanding of how different MURPs perform.

For the present study the case study is selected as a research strategy to approach the topic because of a number of justifications. Firstly, because of the situation in urban mega-projects which requires the researcher to ask the 'why' and 'how' questions in order to address the issues of managing processes of MURPs. Secondly, there was limited information about this subject, since the research is looking at the relatively unexplored area of urban mega-projects within a real-life context. In addition, selecting case study as research strategy, would help to explain the specific case within similar contexts that due to the typical nature of MURPs can be achieved in this study. Moreover, going back to the aim of this thesis which was to develop framework for evaluating current and future MURPs, a case study research strategy is beneficial for generating propositions, 'where all theories are based initially on a particular case or object' (Al-Otaibi, 2010).

4.5 Research Process

Research is considered a dynamic process, therefore, it has to be flexible implying, though not requiring, that a contingency approach will be helpful. A process approach to research is oriented towards change and development (Kedia & Bhagat, 1988 cited in Al-Otaibi, 2010). The questions of this thesis were formed in the process of an in-depth literature review as well as from preliminary interviews. In order to conduct this study the next step after this process was to review a relevant theoretical background. Therefore a case study approach will be implemented to testify and validate the proposed framework.

4.6 Theoretical Construct

An institutional framework is utilised in this research for the analysis of the relationship between different actors of urban developments in the UK and how this influences the likely success of MURPs.

The relationship between urban development, urban management and property development is important when looking within the institutional planning context (Healey, 1998). For understanding formal and informal processes and

how actors perform within these processes, institutional planning perspectives are helpful (Amin, 1992). Rydin (1998) also argued that institutional theory can act as a channel or route for perceiving the significance and nature of organisations, social norms, social and political structures as well as the general economic impact. Definition of institutions are reflected on, their patterns of working and behavioural rules as well as how these routines encapsulate common norms (Lowndes, 2000). The New Institutionalists argue that beneath the surface of 'pluri-centric and horizontal interaction', culture act as an unconscious guidance for the actors' performance and the structure of networks (Cary, 2009). Marsh & Stoker (2012) suggests that institutional theory is important in explaining human action and inaction; governments are not only formal administrative structures but are dynamic, historically embedded entities that sustain and disseminate systems of beliefs and practices, As Healey (2010) explains, Institutions are the framework of norms, rules, and practices which construct action in social contexts. .

New Institutionalism can take many forms, as stated by Hall and Taylor (1996), Scharpf (2000) and Lowndes (2001). Exponents of the New Institutionalist ideology school agree upon the issue that for social analysis the institutional factors are the most appropriate (Peters, Pierre, & King, 2005).

Based on a better understanding of institutional theory, this thesis utilises this approach to analyse urban regeneration projects in the UK. Hence, this research tries to find out how formal and informal institutions involved in urban regeneration processes work with each other, separately and collectively, and how these institutions are related to each other.

4.7 Empirical Research Strategy

According to Patten (2016) empirical research or fieldwork refers to making planned observations by engaging in a systematic, thoughtful process called research.

As pointed out in Chapter 1, the empirical component of the mega-project research involves semi-structured interviews and multiple case studies. It was necessary for the research plan of the present study to address a number of issues that were the result of different economic and social settings. For

instance, identifying the key stakeholders for potential interviewees, conducting semi-structured interviews, monitoring selected projects, as well as paying attention to the accuracy and viability of data for the empirical research.

4.7.1 Preliminary Studies

The research conducted several preliminary studies in the USA and Netherlands to collect preliminary data, highlight potential mega-project issues and obtain general feed-back on the main research issues in diverse contexts In addition, in situations where little data is available about the relevant issues, or no information can be easily accessed about how similar problems have been addressed in the literature, a preliminary study needs to be applied to present similarities with the phenomena, in order to understand the current situation before developing a strict design for comprehensive research (Sekaran & Bougie, 2016). Consequently, a preliminary study was implemented to highlight the literature gap and to act as a pioneer for the in-depth case studies of this research. Hence, in this research, preliminary interviews were conducted in a MURP context with key people and community leaders involved in the re-development of San Diego. This matched with the literature review process to identify the existing problems relating to urban regeneration projects. Furthermore, the interviews were targeted to support the preparation of the case study.

Additionally, a site visit was conducted to the Utrecht Station Area Redevelopment Project (USARP) in the Netherlands as a testing base for the evaluation framework. The site visit involved several rounds of interviews with key USARP stakeholders to discuss critical success factors and project bottle-necks. The visit inquiry investigated how managing diverse and multiple stakeholders accentuated an already complex project. This fieldwork supports the proposed evaluation framework but implies the need for fine-grained primary data for proper urban regeneration project analysis.

4.7.2 Documents Analysis

Document analysis evolves merging several phases in investigating to peruse concepts, data, and other information sources that emerge in the context of the thinking and discovering process of research (Hesse-Biber & Leavy, 2008).

There are five reasons which justify the use of document analysis, these reasons as presented by Hart (2001) are: 1 identifying the key issues and data collection techniques which assists the design of methodology of the projects, 2 the identification of existing or under progress and relevant work, 3 finding a gap in existing research which can result in a distinctive topic, 4 avoiding the errors of previous research and, 5 preventing duplication of previously done works.

The document analysis utilised in this thesis focuses on obtaining secondary data for analytical purposes. Sources used include secondary data from web sites, E-Word Of Mouth (blogs and social media) or project archival documentation to populate the proposed evaluation framework. The archival analysis of relevant documents provided by public and private firms involved in the three case studies. For this study data analysis was done manually for each project separately to find all of the key themes derived from the projects published documents such as booklets and catalouges along with the relevant web-pages to be browsed, linked and coded. The main function of this stage of the research was the storing and manipulating of documents to produce and find nodes.

4.7.3 Case Studies

A case study is a centralised analysis of a person unit (e.g., a human, group, or event) emphasizing developmental criteria in relation to context (Flyvbjerg, 2011). The case study method is very common in social sciences and life sciences. Case studies can be descriptive or explanatory, the second type being used to explore causes in order to discover underlying basics (Shepard and Greene, 2003). Such investigation may be prospective in terms of determining which factors are seen as common and which are specific to a particular project. These factors may be included as they become available or may be

retrospective, in terms of which factors are established for selecting cases from historical data for use in the study (Yin, 2003).
The three detailed case studies of MURPs in London were carried out in order to identify different finance models, type of partnerships and their structure.

4.7.4.1 Case Selection

The UK is one of the largest markets in the world for fund management, and remains Europe's leading centre for fund management (gov.uk website, 2016). The UK government is aiming to create an ideal business environment for investment in regeneration projects across the country.

Table 4.3 show the top 10 MURPs in the UK. The actual criteria for this selection is that all of these projects aim to regenerate the area, cost over 1 billion US Dollar and are located in the UK. However, these projects were arrived at from a much larger population of regeneration projects in the UK. The selection has been based on the highest investment cost and the nature of these projects. Eight of the top ten MURPs are located in London and investors have the challenge of transforming portfolio management into assets that are expected to be more profitable. London has become the global centre for investment in financial and property assets. All of these top ten UK MURPs specifically aim to re-energise run-down neighbourhoods, making them attractive and vibrant. They also offer opportunities to find new purposes for underused or neglected spaces.

Name	Location	Investment (bn)	Investor	Nature
Queen Elizabeth Olympic park	East London	£5.99	Olympic Delivery Authority	Urban regeneration
Leith docks and Western Harbour	Edinburgh	£4.51	Forth Ports, Taylor Wimpey, FM Developments, Gregor Shore	Urban regeneration
Brent Cross Cricklewood	London	£4	Hammerson, Standard Life, Multiplex, North-West London Waste Authority	Urban regeneration
Wembley city	London	£4.46	Quintain Estates & Development, Hilton Hotels, London Development Agency, College of North West London	Urban regeneration
Greenwich Peninsula	London	£4	English Partnerships, Housing Corporation, Lend Lease, Quintain Estates & Development	Urban regeneration
Canning Town and Custom House	London	£3.85	Countryside Properties, Affinity Sutton, English Cities Fund, London Borough of Newham, London Thames Gateway Development Corporation	Urban regeneration
King's Cross central	London	£3.35	Argent Group, London and Continental Railways, Network Rail, London Underground	Urban regeneration
Ebbsfleet	Kent	£3	Land Securities, Countryside Properties	Urban regeneration
Granton waterfront	Edinburgh	£2	National Grid Property, Waterfront Edinburgh, Forth Ports, City of Edinburgh Council and Scottish Enterprise	Urban regeneration
Nine Elms	London	£13	Ballymore, Covent Garden, BPS, Barclay Group, Rotal Mail	Urban regeneration

Table 4.3: Top 10 Mega-Urban Projects in the UK

From the top 10 MURPS stated on table 4.3, the three case studies selected for this research are as follows: (Table, 4.4)

1. Kings Cross development, KC
2. Nine Elms development, NE
3. Queen Elizabeth Olympic park, QE

	Partnership	Funding method	Completion
KC	Private	Balance sheet	90%
NE	Public-Private	TIF	10%
QE	Public	Direct governmental funding	50%

Table 4.4: Case Studies (source: author, 2014)

The criteria for this case study selection will be discussed in Chapter 6.

4.7.5 Semi-structured Interviews

In qualitative research interviews, the central concepts and themes of real life are described, hence the main responsibility of the interviewer is to understand the meaning of whatever the interviewees would say to her or him (Kvale, 1996). This research involves 32 semi-structured interviews that were conducted in order to support and validate the proposed evaluation framework. This is achieved by seeking the views of key stakeholders on the selected MURPs (Kings Cross, Queen Elizabeth and the Nine Elms Regeneration), academics as well as the independent experts on the field. The respondents were asked to score the importance of eighteen attributes on the success of a MURP. The eighteen attributes were extracted from the proposed evaluation framework presented in the form of a table. (Appendix)

4.7.6 Data Analysis

Analysis of data involves a process of evaluation, filtering, transforming, and formulating data with the goal of highlighting beneficial information, recommending summaries, and supporting decision-making. Data analysis takes various shapes and approaches, embracing different techniques under a variety of titles, in different business, science, and social science areas (Adèr, 2008).

Specific software such as Nvivo is used in this study for the analysis of interview results and document analysis. For each specific case study a number of documents such as the interview scripts, project web page in PDFs format, relevant articles and the collection of archival material and government reports were imported into NVIVO as a source material. The software helped to identify similarities, extract themes, create generalisations, identify relationships and highlight differences between case studies.

4.7.7 Validity and Testify

With regard to the validity of qualitative analysis, Patton (1990) comments that a qualitative method is more concerned with information richness and the observation of all the analytical capabilities of the researcher rather than with sample size.

The role of the researcher, in particular, for qualitative research analysis is very important as this type of analysis and its validity requires her or him to be creative, have great knowledge and skill and be competent (Guba and Lincoln, 1981; Patton, 1990). There are many ways of demonstrating the robustness and trustworthiness of qualitative analysis. According to Scandura and Williams (2000), triangulation improves external and internal validity of a phenomenon as it synthesises distinct research strategies in one study which helps to counter the trade-offs inherent in others". It is described in section 4.4.2.

4.8 Summary

The first phase of investigation is to review the relevant literature. Firstly, a mega- urban regeneration project is defined, followed by a typology of different MURPs. These include sport-based regeneration projects such as the London Olympic, Barcelona and Sydney projects; or arts and culture based regeneration projects such as those found in Bilbao and London; themed leisure based projects similar to Balboa Park in San Diego, Disneyland in Paris or Florida; or mixed use developments such as Kings Cross and Thames Gateway in London, the Titanic Quarter in Belfast, or Liverpool One. Furthermore, the literature review identifies the policies, models and methods of urban regeneration finance and addresses key questions concerning the specific characteristics, institutional framework and the relationship between different sectors and other interested stakeholders. Having studied the previous literature it helps in the case-study selection. The focus of the literature review has been on what constitutes a successful urban regeneration development and the evaluation criteria of a sustainable regeneration project.

Furthermore, the researcher was involved with the Commercial Local Urban District EU funded project and travelled to the United States and arranged preliminary interviews with a number of key people and social leaders involved in the redevelopment of San Diego. This helped the researcher to test the idea for preparation of the case studies. Findings from the literature review have led to the need for further investigations into current mega-urban regeneration, to identify different finance models and the type of partnerships and their structure. A number of semi-structured interviews were conducted with a range

of council members, planners, finance experts and developers in charge of the urban regeneration projects in order to obtain information at a strategic period.

Having conducted an extended review of the literature and benefited from the preliminary interviews, the Mega Urban Regeneration evaluation model was generated. The proposed model has three pillars of institutions and project and innovative funding models. Having generated the evaluation framework, its plausibility was investigated against the mainstream construction literature. The next step involved deciding on the screening tool's criteria with secondary data from web sites, e-Word of Mouth (blogs and social media) and project archival documentation,

Moreover, a site visit to Utrecht Netherlands was arranged to test the practical grounding of the proposed model.

Three case studies have been selected in London: the Kings Cross project, The Nine Elms project and the Queen Elizabeth Olympic park development. In the selected case studies as was discussed briefly earlier in this chapter, key concerns were:

1. Identifying the actors within both private and public sectors, and

2. Monitoring the cases during a specific period of time and 3. The accuracy as well as the viability of data that was used.

The empirical part of the research will be finalised by the organisation of thirty two semi-structured interviews with key stakeholders involved in the main MURPs in London. NVIVO software is used in this research for analysis of interview results and document analysis. The objective is to fine-tune the screening tool and to identify the circumstances in which it would be most applicable in delivering Mega Urban Regeneration projects.

5| MURP Evaluation Framework

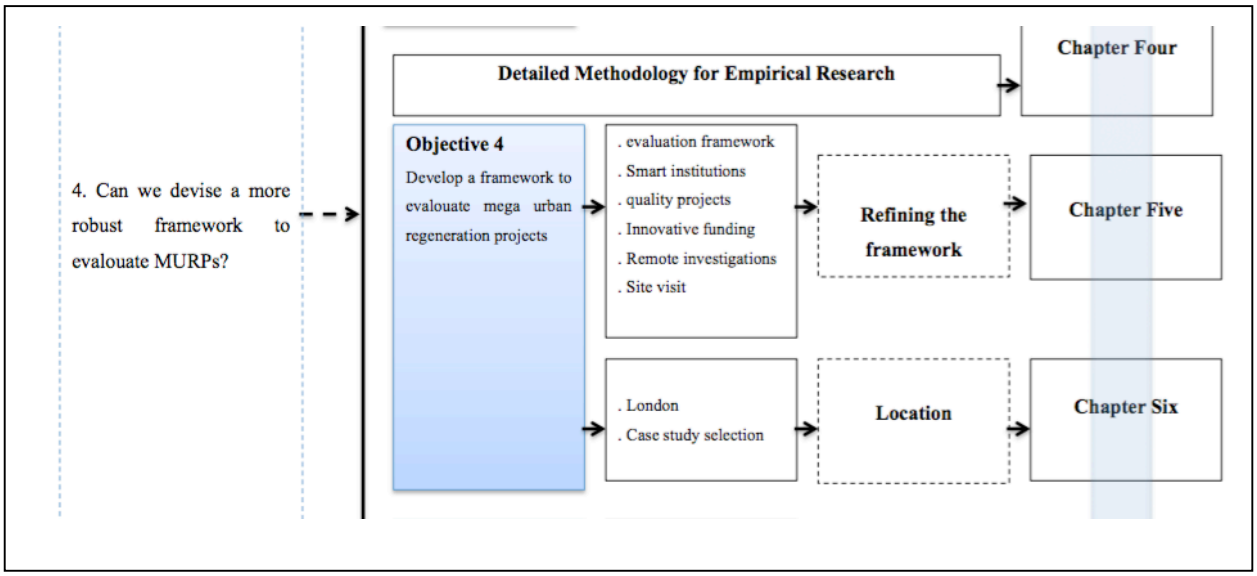


Figure 5.1: Thesis Structure (respective objective, methodology and chapter structure)

Chapter 5: MURP Evaluation Framework

5.1 Introduction

The aim of this chapter is to address objective four, to develop a framework for the evaluation of Mega Urban Regeneration Projects (MURPs). The chapter opens with a discussion of the key components of the proposed model, drawing largely on the findings of the literature review from Chapters 2 and 3. It further investigates the proposed model's plausibility against the mainstream literature on urban regeneration. The chapter deliberates about the remote, secondary data testing of the evaluation framework that was conducted for a regeneration project in Utrecht, Holland. The chapter concludes by presenting the final framework.

Mega-projects have been described as untamed political problems, invoking contested information (Bruijn & Leijten, 2008). Operational risks include fraud, cost escalation, and "cack-handed over-sight" (Flyvbjerg, Bruzelius, & Rothengatter, 2003a). Mega-project outcomes can underwhelm, polarise communities or rapidly depreciate. Less grandiose urban transformation involves territorial foresight, debate, local engagement, institutional collaboration, project scrutiny and smart finance (Adair, Berry, Hutchinson, and McGreal, 2007; Güell & Redondo, 2012). For Batty (2013), social innovation resolves the 'smart' technical or social paradox. This chapter seeks a pathway for sustainable MURPs in terms of eudemonic empowerment that avoids profligate mega-projects or debilitating laissez faire.

The purpose of this thesis is to articulate and substantiate a MURP evaluation framework with procedural and multiple teleological dimensions captured via smart institutions, quality projects, and innovative funding as illustrated in Figure 5.2.

Place-rooted and soundly administered, smart projects balance commercial with public realm considerations. The MURP framework could help to inform resilient planning amidst the regional and local noise (Chorley and Haggett, 2013). It balances localism with informed transformation for employment, aesthetics, logistics, or distributive justice, while at the same time it is tightly overseen and tempered by the rule of law. Site visits and grass root consultations restrain excess and refine transformative goals for beautification,

pedestrian connectivity, waste management, network connectivity, and ecological conservation. An elaboration of the institutional, project and funding aspects of the putative model provided some discursive corroboration of its relevance as an evaluation framework for planners, developers, financiers, or residents.

5.2 Problem Statement- Why a MURP Evaluation Framework?

It is widely argued that a good evaluation should not only focus on the achievement of the project's objectives but also consider the processes needed to achieve those objectives. According to Jack and Breeze (2008), in order to carry out any meaningful evaluation of a sustainable regeneration project, it is important to develop a common evaluation approach that specifies the processes required to be followed, as this will enable a systematic evaluation of the factors concerned. Chapter Five starts with an exploration of the problem statement about why there is a need for a MURP evaluation framework, and then throws light on the development of a MURP framework that is the fourth objective of this thesis and also considers the process that was adopted to reach the framework.

Clearly, the failure to tackle spatial or market externalities is neither 'smart' nor 'sustainable'. A smart MURP seeks to internalise such factors and facilitate urban adaptation for sustainable prosperity. Its constituents are foresight, policy coordination, and well-funded but judicious interventions. It impels capable planning institutions, and is focused on more compact, connected, resilient, and inclusive futures as a pre-requisite, but with no guarantee of eudemonic well-being (Wadley, 2010). Rather than indiscriminate output or even hedonistic well-being, the eudemonic focus is on competence, autonomy and relatedness of citizens (Acemoglu & Robinson, 2012; European Climate Foundation, 2010; Geltner and de Neufville, 2014; Turner, 2014).

5.3 Mega-Urban Regeneration Projects (MURPs) Evaluation Framework

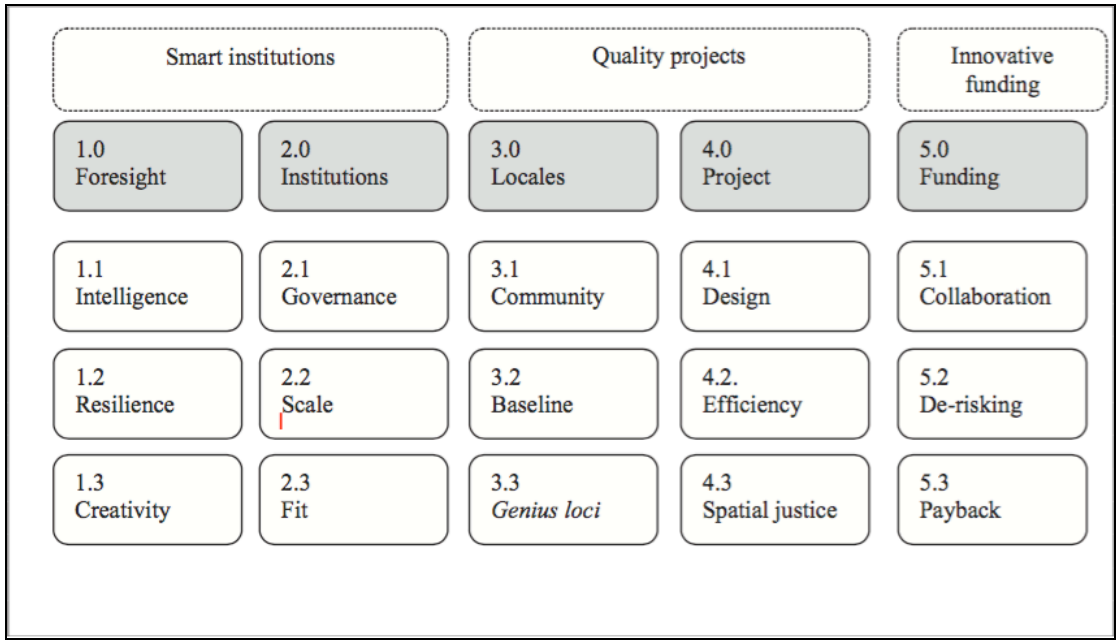


Figure 5.2: Outline of the conceptual evaluation framework, involving institutional, project and funding dimensions. Source: Rahimzad (2014), adapted from Thomas et al. (2000), LópezLópez, Thomas, and Wang (2008), von Brown and Gatzweiler (2013) and Floater et al. (2014). Smart institutions presume sound macro policy at the national scale with policies to incentivize balanced development and correct market failure. At an urban level, the green 'design' aspect incorporates conservation of 'natural capital' and 'connectivity'. Technical progress and productivity sit within 'efficiency'. 'Spatial justice' and 'resilience' addresses marginality and social exclusion.

Figure 5.2 illustrates the MURP evaluation framework outlined from an in-depth study of the literature in Chapters 2 and 3. The collapse of Britain's industrial and manufacturing economy has left many inner city areas blighted by unemployment, riddled with poor housing and socially excluded from more prosperous districts. Sustainable MURPs offer a solution that attempts to reverse that decline by both improving the physical structure, and, more importantly and elusively, the economy of those areas. Hence it is important to develop a model to evaluate these constantly cumulative projects to boost sustainability along with the enhancement of the living standard.

5.3.1 Smart Institutions

Having touched on the external and internal risks, policy muddle, and polarisation that impel MURP, we now elaborate on the first of our three pillars model. Smart institutions should foster quality growth and curtail extractive modes. Requirements include a future orientation towards resilience and creativity, sensible spatial architecture and disposition towards collaboration. In contrast to extractive modes, smart institutions seek to remedy, not exploit, market failures and to attenuate, not reinforce, structural inequalities (Acemoglu & Robinson, 2012). Sustainable MURPs tap new on-line technologies and geographical data to capture, model, or visualise projects that inform planning and negotiations. Collaborative interplay begins with appropriate scales (boundaries) and tight institutional fit (design). Proper governance reduces financial manipulation or fiscal distortion and incentivises projects with conservation, education, or health spin-offs. Inclusive institutions, authentic debate, subsidiarity, and the rule of law temper extractive proclivities.

5.3.1.1 Foresight

A smart response to multiple urban challenges begins with the articulation of purpose (to engineer resilience or foster creativity). The next step is to collect useful intelligence to understand places (Floater et al., 2014) and to celebrate their distinctive historicity, heritage, or landscape. Informed spatial transformations (out- comes) rely on science or architectural and design excellence but need grounded urban intelligence. Archival research, baseline analysis, expert views, and structured stakeholder engagement help understand place character (ambience and atmosphere). Comprehensive site diagnostics inform smart institutions on relevant, scientific, commercial, and local concerns about contamination or disruptive intensification (habitat loss, blight, noise, emissions, congestion, or service stress). In smart cities, decision-support or geographical technologies help stakeholders visualise alternate project permutations to evaluate architectural, connectivity, spatial justice, and ecological impacts.

5.3.1.2 Institutions

Smart planning institutions are properly articulated (in scale and scope) and well governed. Inspired by the common good, smart planning interventions seek to attenuate spatial injustice without undermining customary or bona-fide formal property rights or cultural practices. Top-down leadership and vision drives strategic transformation of urban environments (Freedman, 2014). Smart MURPs may reject transformation and intensification in favour of preservation or conservation. The institutional culture of MURPs is managerialist, in the sense that it eschews spectacle and seeks long-term solutions to substantive economic and social problems (Harvey, 1989).

Pragmatism and diplomacy help institutions navigate complexity and local power politics or vested interests. Institutional fit, good governance and authentic consultation mitigate the risk of outlandish projects, fanciful projections and cost blow-outs.

Institutional design and partnership management facilitate project-delivery. A proper spatial, temporal and functional fit helps configure institutional and network architecture to match operational requirements. Catchment management and water security problems are typical. Temporally, urban decision-makers sometimes have a short-term, electoral focus. Functionally, nested organisational concerns can sometimes undermine the achievements of foresight or collaboration.

To conclude, the literature on institutes supports the creation of a MURPs evaluation framework to mitigate uneven geographical development. The constituent parts of sustainable MURPs include strategic foresight and well-functioning and tightly-fitting institutions, orientated towards resilient and creative futures. Institutional constraints include skills, technology, finance, vested interests, collaborative silos, spatial data, and community alienation or fragmentation (Talon, 2010).

5.3.2 Quality Projects

Urban regeneration quality considerations are multi-faceted but include architecture, design and the public realm, or connective infrastructure such as sky trains or rail tunnels for compact or connected cities (Floater et al., 2014). In terms of place-making, the ‘smart’ solution confronts meaning ambiguity,

'place' complexity, and institutional diversity. Places are not two-dimensional but complex constructs with multiple agent network interactions. Institutionally, traditional planners confront alternate policy foci (firm competitiveness, local health, or school operation, for example). Clashes between conceptual frameworks and legitimising rationales are common place (Healey, 2007).

5.3.3 Innovative Funding

The third pillar for MURPs evaluation framework is a viable public or private funding model. The current commodified fiscal regime can sometimes undermine forward-thinking investments such as Transport Orientated Developments (TOD) or canal restoration projects with land amalgamation or complex planning, geo-technical and construction issues (Searle, Darchen, & Huston, 2014). Hence, political and business cycles, public finances, or market conditions can all shape or constrain transformation viability. Capital and space market intelligence can identify turning points which might alter project financial viability. In due course, gentrification can mediate adverse market conditions and unlock the commercial potential of ethnic locales, as seen with Brixton in London. However, whilst commercial or subsidised viability is necessary, it is not the sole consideration for smart MURPs (Brookes, 2013; Vanolo, 2014).

To conclude, MURPs' socially inclusive aspirations require due diligence around partnership structures and public or private funding models. In deprived areas, effective public realm enhancement can be expensive. Outlays are either directly recouped from local beneficiaries, or they are indirectly recovered from proximate or remote general taxation.

MURPs' partnership effectiveness requires an agreed territorial vision and operational effectiveness. It calls for leadership, collaboration, institutionalisation, and local legitimacy rooted in dialogue and community spatial spinoffs – jobs, health, conviviality, and spatial justice. Its long-term goals are urban 'resilience' and community 'creativity' but its ethos is public-spirited, administrative and policy-driven. However, multiple and lofty Sustainable MURPs aspirations load development costs on to projects in disadvantaged locales which can erode feasibility. Public funding aside,

commercial counterweights include land-gifting, tax breaks, subsidies, project de-risking, and TIF. De-risking solutions involve corporate governance, structured community dialogue and a robust payback model. In propitious locales, TIF or social infrastructure bonds can provide alternate funding solutions.

5.4 Remote Investigations

Having generated the MURP evaluation framework, its plausibility has investigated against mainstream literature, as illustrated in Table 5.1. The structured analysis of the literature supports the three MURP framework pillars of smart institutions, quality projects and sustainable funding. However, when we populated the evaluation framework's criteria with secondary data from websites, e-Word of Mouth (blogs and social media) or project archival documentation, it could not adequately discriminate between the projects.

Author (year)	Smart Institutions	Quality Project	Sustainable Funding
1 Freeman and Beale (1992)	X	X	
2 Savindo, Grobler, Parfitt, Guvenis, and Coyle (1992)	X		
3 Turner (1993)	X	X	X
4 Munns and Bjeirmi (1996)	X	X	X
5 Atkinson (1999)		X	X
6 Chan and Chan (2004)	X	X	
7 Cox, Issa, and Aherns (2003)		X	X
8 Westerveld (2003)		X	
9 Phua (2004)		X	X
10 Nguyen, Ogunlana, and Lan (2004)		X	X
11 Hemphill, Berry and McGreal (2004)	X	X	X
12 Sohail and Baldwin (2004)		X	X
13 Low and Chuan (2006)	X	X	X
14 Wedding and Crawford-Brown (2007)	X	X	X
15 Winston (2010)		X	
16 Shamas-ur-Rehman Toor and Ogunlana (2008)		X	
17 Shamas-ur-Rehman Toor and Ogunlana (2009)		X	X

Table 5.1: Summary of Smart-SUR Domains considered in Mainstream Project Literature

5.5 Site visit

A site visit to Utrecht Station Area Redevelopment (USARP) project in the Netherlands as a practical proving ground for MURP evaluation framework was arranged. The €3 billion project was conceived back in the 1990s, although construction only started in 2007. The redevelopment sought to intensify and

rejuvenate an inner city area, enhance cycling and public transport access and improve permeability between the old historical core and station precincts.

Specific construction elements included a new railway station area, renewal of the Hoog Cathrijne shopping mall and upgrades to pedestrian walkways as well as renovation of the Catharijnesingal Canal. The site visit involved several rounds of interviews with key USARP stakeholders to discuss critical success factors and project bottlenecks. A semi-structured interview was conducted with key stakeholders involved with the project; assistant project manager of the Organization Station Area, planners and project associates who were actively involved in the scheme and academics from the University of Maastricht. The outcome was that managing diverse and multiple stakeholders accentuated an already complex project.

Current Issues and Complexities Confronting the USARP Project

Introduction of public transport OV chip-cards in June 2010 has intensely affected the project. Ever since the travellers have been required to scan their OV card in order to pass through the station building, the function of the station as a bridge to connect two side of the city has been weakened. This has resulted in changes to the original design of the station as a passage way and led, instead, to the implementation of a boulevard outside the station for public travel.

In 2006, the European Union commenced new regulations for major cities to drop their air pollution to a certain level by 2040. Thus the scheme had to speed up and focus on the implementation of light way systems prior to other planned tasks; this has caused delay on the delivery of some parts of the project.

Municipality elections take place every four years and can change the direction of any large scheme when a different city council takes power. This is an uncertain factor for private companies and since they own 2/3 of the area the project is heavily dependant on their plans.

The City of Utrecht owns one third of the project area, while the rest is owned by private companies via leasehold contracts. Therefore the ground on paper is owned by the city but the major companies have leasehold contracts on them for various periods. For example, the shopping centre complex is owned by Corio but the apartments and offices above it have different owners. Therefore,

any decision each stakeholder makes has an impact on others - therefore their permission is required. (Fig 5.3)

The government's objective has been to limit and guide auto-mobility. This aim has been achieved to a degree by focusing on cycling and public transport (especially buses). However, this has consequences on the current issues facing the city today due to the huge numbers of cyclists travelling to and through the city centre, along with the matter of a cyclist parking shortage. However, for a compact city such as Utrecht, it is possible that mobility could be solved by the implementation of underground public transport, similar to the solution Amsterdam reached in 1977. Today the plan is to invest in bus and tram transportation, although these will not reach their full capacity for ten years – in the meanwhile, the problem will remain the same.

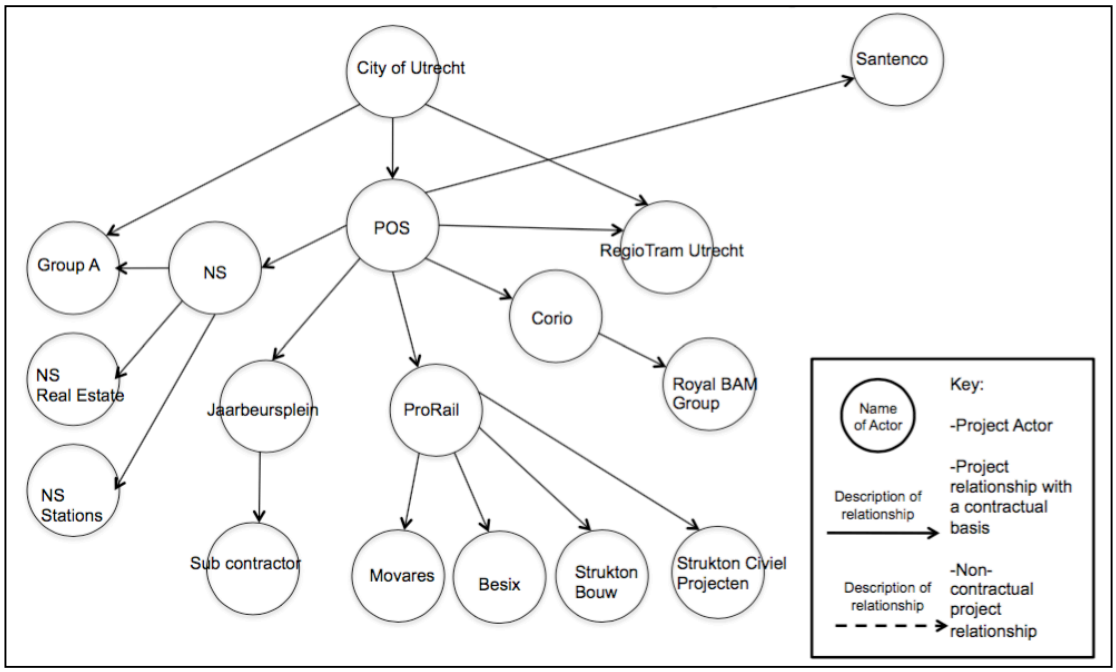


Figure 5.3: Stakeholder Relationship Map (Source: Author)

The main risks that could affect the outcome of land development relate to the real estate programme and the unforeseen development costs of acquisition and construction.

		Category	Issue	Corresponding with
1	Internal	Smart institution	Relocation of private companies	Governance
2		Smart institution	Presence of six major internal stakeholders	Scale/ fit
3		Smart institution	Presence of 150 external stakeholders	Scale/ fit
4		Project quality	Soil pollution	Baseline investigation
5		Project quality	Water pollution	Baseline investigation
6		Smart institution	Inefficiency of Master plan	Intelligence /resilience
7		Smart institution	2/3 of land owned by private stakeholders hence their confirmation required	Governance
8		Innovative funding	Unforeseen developments costs of acquisition and construction	Funding
9	External	Political issue	Public transport chip cards	
10		Political issue	Municipality election every four years	
11		Political issue	Air pollution regulation	
12		Political issue	Economic crises	

Table 5.2: USARP Issues and Complexities (Source: Author)

Also, site preparation of land can add to the length of the operating period of the scheme. After the construction began, another issue was raised regarding the soil pollution in the area and the risk for the pollution to spread more widely through the local region; this would have been highly harmful for humans and for the environment. The cleansing of the soil is a very costly process and the city was short of money to pay for it.

The site visit high-lighted the problem of project evolution and interference by diverse stakeholders with conflicting agendas. Stakeholder pressure and political serendipity forced ad-hoc amendments to an already complex project. At times, influenced by short-term electoral and business cycles, government territorial foresight and long-term commitment wavered. Nevertheless, the project has survived its political and budgetary travails. Today, it remains on track for completion in 2030. (Table 5.2)

5.6 Conclusion

This chapter illustrates the formation of the outcome of this thesis which was the MURP conceptual evaluation framework with ‘institutional’, ‘project’ and

innovative ‘funding’ components. This framework has developed and corroborated its plausibility by: 1 outlining the UK urban regeneration backdrop and polarised narratives, 2 assessing some iconic international projects, 3 conducting a structured review of the urban regeneration literature, 4 analysing secondary-data about significant UK urban projects and 5 investigating a mega urban regeneration project. The MURP evaluation framework provides a useful tool to screen urban regeneration projects. It involves both procedural and balanced multi-faceted teleological considerations (outcomes and impacts). Urban regeneration extends beyond development and engineering efficiency in terms of time, cost, and project delivery. Sustainable urban regeneration projects build on local roots and aesthetic identity but are complex with multiple contested goals and high information costs. Betterment ideals are balanced by practical awareness of competing foci and, hence, administrative complexity. Sustainable MURP transformational aspirations for urban realm enhancement or spatial equity must be balanced by a sober consideration of legal and planning process, impulses to self-determination, entrepreneurship and, not least, financial viability. Smart partnership credibility and legitimacy is as important as ex-ante modelling of urban transformational outcomes or functional impacts. Regeneration oversight extends to the monitoring of partnership output (policy, contracts), construction milestones, local transformative outcomes, and eventual community impacts. Transformational outcomes could include density, green-space, connectivity, affordable dwellings, energy use, waste, or financial returns. Careful deliberation involves due consideration of heritage, cultural diversity, and ecology. Improvements should eventually translate into impacts such as local inward investment, start-ups, jobs, or tax receipts, spatial housing justice, permeability (pedestrianisation, cycling, and public transport). Notwithstanding spatial resolution or temporal cut off, indicators of disease, poverty or crime should decline. In short, a regenerated community is more resilient, healthier, and more prosperous, although these obstacles can still hinder the practical implementation of Sustainable MURPs.

6| Location

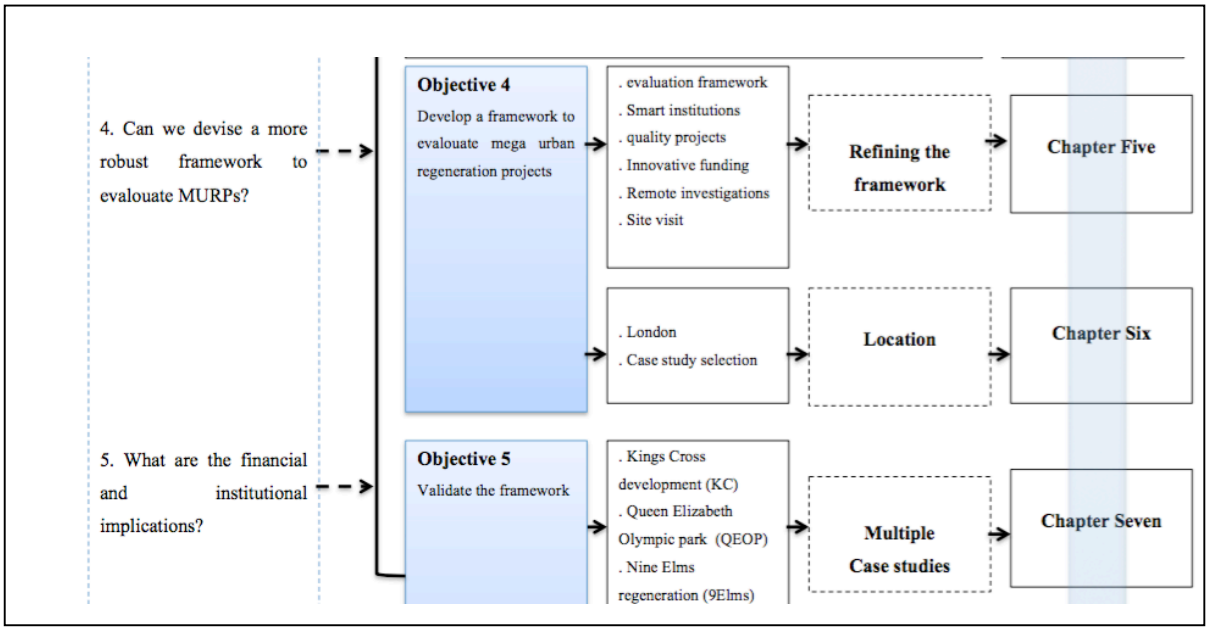


Figure 6.1: Thesis Structure (respective objective, methodology and chapter structure)

Chapter 6: Location

6.1 Introduction

The previous chapters outlined a proposed framework for evaluating MURPs, based on findings from the literature combined with exploratory studies from the USA and Europe. This chapter sets the location context of the three London-based case studies:

the characteristics of Greater London, from a historical, political and economic viewpoint, with its pockets of poverty and inequality in certain areas, and also the physical and economical polarities within the inner city which the three MURP case studies are intended to address. The chapter will explain the socio-economical profile of each of the three case studies - all of which are in deprived areas.

This chapter is in five sections. Section 6.2 scrutinises London from a historical and geographical aspect, and then discusses the distinctive nature of London as a global city. Section 6.3 discusses the case study selection. Section 6.4, 6.5 and 6.6 discuss the Kings Cross development, the Queen Elizabeth Olympic Park development, and the Nine Elms development, respectively. Finally Section 6.7 concludes the chapter.

6.2 London

Over the past few years the concepts of 'globalisation' and the 'global economy' have attracted increasing attention from economic geographers (Chapter Two). In the 1970s, a number of 'world cities' became directly connected through intricate communication networks and commanding global space. The main global cities are headed by the 'truly international financial centres' (Budd & Whimster, 1992) of London, New York and Tokyo. In the 1980s, the importance of these centres grew dramatically (Leyshon, Daniels, & Thrift, 1987; Sassen, 1995; Swyngedouw, 1992). Sassen (1991) notes that the combination of spatial dispersal and global integration created a new strategic role for 'global cities' such as London, Tokyo and New York.

According to Sassen (1991), beyond their long histories as centres for international trade and banking, global cities function as highly centralised

command and control posts in four distinctive ways: First, they serve and work as a core of the world economy; second, they are functioning as main financial or other specialised service firms; third, these cities are leading the production of innovation and work as sites of production in different industries; and fourth, they function and control as markets for the related innovation and production. The globalisation of finance is very dependent on the emergence of transnational banks as well as the activities and transactions of different financial firms and banks that take place at the national markets; for these activities the issue of integration across different national and international markets is very important (Cerny, 1994).

As explained in Chapter Two, the globalisation of finance that has taken place over the last couple of decades points to the increasing importance of global cities such as London. Concurrently, we have seen the rise of the 'mega–developer', who is able to use international money markets and innovative funding models to finance large scale urban regeneration developments such as Canary Wharf in London.

Deloitte's research views London as the most global of the cities, with a highly multi-cultural demographic and "exporting" executives to other locations around the world. This is the city's "soft power" – the notion that someone who attends business school in London and then returns to their own country (or migrates elsewhere) will carry their London-made business connections with them, and this expands the city's influence worldwide. The London Business School is the world's third most successful, and the city benefits from the nearness of the top two global universities at Oxford and Cambridge, as well as the eighth-ranked university, Imperial College. By way of comparison, Paris notably has the top business school (INSEAD), but no university in the top fifty; New York has Columbia University, which is ranked 14th globally (World University Ranking, 2018).

However, London also faces some challenges, not least of which is its rapid growth, which has become an area of concern for successive UK governments. According to The Guardian, the population of London grew at twice the rate of the UK as a whole between 2011 and 2015, and it could reach almost 10 million by the middle of next decade based on official figures. Office for National Statistics reports that growth of the population across different cities

and regions often depends on the economic strength of the location. Evidently London's attraction to immigrants establishes its status as a major employment centre and international hub. (The Guardian.com, 2016)

Osborne (2016) also argued that the relative facts and figures for housing numbers in London indicates an increase of '3.5% between March 2011 and March 2015'; which, as he suggested, could mean a further pressure on London's housing stock and the latter will result in more overcrowding problems and will put more pressure on rental prices (Osborne, 2016).

Another area of concern is inequality, not only between different regions of the UK but also within London itself. There are severe shortages of recruits for highly skilled jobs, and even middle skilled jobs increasingly lack appropriate applicants. Employers are often too inflexible, refusing to take on part-timers who could help full some of these gaps. Another factor is the cost of living – as an extremely high cost destination, London faces not only the economic burden that goes with this but also the social problems that can result from its extremely high property prices and rents.

6.2.1 History of London

Unlike other European cities, London's development was unrestricted by the city wall and its boundaries; in addition London carried on as a relatively low density city for centuries which resulted in it becoming a suburb city in the sense that it was surrounded by lots of cities. The creation of successful suburbs was what effectively defined London as a city (Rasmussen, 1937).

By end of the 1970s, London continued to expand over time, but now residents were leaving the inner city, not only to the suburbs but beyond, to all the Home Countries and in rings of growth that rippled further from London with each passing decade. (Hall, 2007)

When Margaret Thatcher came to power, in 1979, the British economy was facing problems caused by deindustrialisation, globalisation and relatively high labour costs. All of this meant that British manufacturing industries found it hard to compete on the world market. The ideology of the Thatcher government was that inner cities were longer attractive for the private investor and that is why urban deprivation and market failure happened during those

years. The Thatcher strategy for tackling these problems was to address the urban deprivation problem by encouraging the market and private sector and investors to re-invest in these areas which benefits the wider local economy and results in population growth (Carpenter, 2014).

This was followed by New Labour's "urban renaissance" policy discourse that surfaced following the publication of "Towards an Urban Renaissance" (UTF 1999). State encouragement of private-sector investment in city-centre redevelopment has been called the "state-led gentrification" of Britain's inner cities, with the wealthiest people now living in central parts of London and other large cities (Colomb 2007; Carpenter, 2014). The report of the Urban Task Force (UTF 1999) aimed to address what had become a widespread view of western inner cities as being marked by decay and decline, following the exodus of prosperous groups to the suburbs. This had left unused and underused land in the central areas and this created both a problem to be addressed and an opportunity for regeneration (Edwards, 2009).

6.2.2 The International Context of Change in London

In the 1990s and the following decades, the world economy was characterised by flows of finances, increased interests of investors as well as strong capital accumulation (Punter, 2009). London has become a global centre for investment in financial and property assets while the UK is one of the leading countries with the largest market in fund management (Gov.uk, 2016)

The purpose of investment in property assets is capturing a combination of income and future growth in capital values and is almost self-sustaining. Therefore, since the supply of property in decent locations and especially where the planning rule are restrictive, demand tends to escalate, thus prices continue to rise because investors continue to believe in future value growth and thus continue to invest (Edwards, 2009).

After the 'big bang' of the 1980s, the demand for central office space within the city of London increased dramatically - both in quantity and in scale of floor plates; this demand was caused by the flourishing of unregulated financial market within the city (Edwards, 2009).

Massey (2007) suggests that, moved by the Thatcherism neo-liberal influence London took a leading role in re-structuring and in advising on privatisation

and transformation in the former communist societies, generating growth in the management consultancy and related legal professions, also based in London (Edwards, 2009). These changes were one of the contributing factors turning London into a leading region with dominating economy and resources which attracted many investments and inhabitants and therefore resulted in the creation of a big gap between different parts of the country and, as Dunford (2005) stated, within other European member states (Dunford, 2005).

6.2.3 London as a Global City

Hoggart (1991) describes London as a city of diversity and contrasts that are manifested more starkly than in other cities. UK governments subscribe to a particular narrative about London's global development. Rob, Loretta, & Mike (2009) refer to this narrative as 'globalism' which is based on 'the naive idea that the world market is the patent medicine for all of society's ills'. The global city emphasis extends to urban policy and to the role of regeneration projects as a catalyst for the city's growth. Growth is conceived of as part of interlocking special scales, in which a cascade (or trickle-down) of economic benefits is intended to follow from the inflow of investment (Matthews, 2010).

Figure 6.2: Economic Output in Constant Prices for the Global Cities between 2006 and 2014, (Source: ONS, US BEA, INSEE, Statistik Berlin Brandenburg. Note: Paris states to 2006 to 2013 period and Shanghai only involves output of urban units)

Figure 6.2 compares London with other global cities, especially from the point of view of economic output. London's average economy shows an increase of 2.4% per year between 2006 and 2014 which has grown faster than the average of New York and Paris, but much slower than the newly emergent global cities of Shanghai and Singapore. Some of these rapidly developing cities have enjoyed growth rates that were twice as fast as London. Consequently, London will likely have a larger economy output compared to other Western global cities in the future. These statements suggest that the globalism agenda is considered as part of development politics in London based on picking winners and investments in selective, strategic infra-structure projects (Matthews, 2010).

According to the Greater London Authority (GLA), 'London's economy is mainly services-driven with primary and secondary industries contributing only 9% of the total output in 2014. Although other global cities are also orientated towards services, cities such as Berlin and Shanghai have much larger manufacturing sectors (Mayor of London, Source: london.gov.uk, 2016).

London has one of the world's highest employment rates, especially for women. Power & Houghton (2007) argue that London is easily the UK's most complex, diverse and socially mixed city, whose complexity and diversity has grown dramatically with the rapid expansion of London's population.

Table 6.1: London Population (census data, 2011)

Table 6.1 illustrates London's population from 1939-2006 and the prediction for 2026 based on the most recent census. Based on the 2011 census data, London is the most populated city in the UK with a population of 8,173,941; it is the third largest city in Europe falling behind Istanbul (14.3 million) and Moscow (12.1 million) and the largest city in EU (Census data, 2011).

Figure 6.3 illustrates the pattern of central London prime rental market values in 2017. Over the past year, the prime London rental market has felt the impact of growing uncertainty over Brexit, which, in turn, has led to a lower corporate demand.

A report published by CBRE indicates that nearly two-thirds of major international companies still have an office presence in London (CBRE) and that London is ranked as the fourth most popular business location in the world. Business Footprints ranks Hong Kong, which is home to 68.2% of companies surveyed, as the world's number one business location, followed by Singapore (67.5%) and Tokyo (63.9%). The top five is completed by Shanghai (61.4%).

Figure 6.3: Central London Prime Rental Values by Market (source: CBRE research)

Figure 6.4 illustrates central London business sector clusters. Historically, the UK has a long tradition of this kind of gathering of industrial hubs – the cotton mills of Greater Manchester, for example, or the shipyards of Glasgow and Belfast, or the financial centres in the City of London.

21st century technology is transforming these hubs as centres of new industry development. Technological innovation is transforming many parts of the UK – with a range of products from cutting-edge medical technology to Technology, Media and Telecommunications (TMT). Technology clusters are now

appearing in diverse locations and this is evidence of the geographic spread of the tech start-up community in the UK (Cbre.com).

London has other strengths besides business and technology; as a tourist city, it is seen as the world's top destination with 18.82 million inter-national visitors welcomed in 2015 alone.

Figure 6.4: Central London Business Sector Clusters (source: CBRE Research)

6.2.4 London's Problems

The Greater London region, which consists of 33 districts, forms the administrative boundaries of London and covers 1,572 km^2 and has a population of 8.788 million people. The responsible local authority for this region is the Greater London Authority (GLA), which comprises the Mayor of London and the London Assembly.

Despite the strength of London, large parts of it have yet to recover from the de-industrialisation of the 1970s and 1980s in which approximately half a million jobs disappeared (Turok and Edge, 1999). According to Edwards, many of the ethnic groups, including poor whites of London's population remain largely overlooked within its urban economy. The unemployed are confronted

with low wages and high living costs; many retired people and a considerable proportion of the population, effectively discarded by the economy, depend on inadequate state benefits or live in poverty (Edwards, 2009). The growth in London is taking place with a rapid expansion of both employment and population and a sharp housing price escalation. One reason for high housing prices in London is due to investors playing the market to maximise their benefit.

Figure 6.5: Map of London Boroughs (source: www.ons.gov.uk)

Underpinning this process is an uneven quality of urban life in different areas – for example, there is a shortage of jobs and good schools in some areas, and there are differing transport costs between different areas of the city. Therefore, some major changes in the role of housing and property investment in the whole economy are now required. The introduction of MURPs is intended to provide one solution for the problems caused by the expansion of London, tackling the housing and job shortages and enhancing the quality of Londoners' quality of life. Housing affordability is a major concern; rapid house price increase in the past ten years have made the situation more acute. The top ten

most deprived areas in the UK are illustrated in the table below; that four of these are located in London. Table 6.2 shows the change in deprivation between 2007 and 2016 while Hackney and Islington are no longer in the top ten most deprived areas in the UK. Barking and Dagenham is the only London Borough featured in the top ten most deprived areas in the UK.

Table 6.2: Top Ten Most Deprived Areas in the UK.
(Source DCLG, 2016)

According to London's poverty profile, the Inner East and South all perform poorly across a range of indicators with six out of the eight boroughs in the bottom half for London overall (Aldridge et al, 2015). Ealing and Brent are now two of the worst performing boroughs in London, with exceptionally high levels of low pay and unemployment. The three worst performing boroughs within the Inner East & South region (Newham, Haringey and Lewisham) are also the furthest from the centre of London and share much of their borders with the Outer East & Northeast sub-region which also performs relatively badly (Aldridge et al, 2015).

Figure (6.6) shows the average house price, by English regions, from January 2004 to January 2017. London showed the highest average house price increase of all regions, increasing from £200,000 to £500,000 during that period.

HM Land Registry and Office for National Statistics)

Another problem for London is how its rapidly expanding population has led to housing shortages. A report from Jones Lang LaSalle (JLL) Corporate Property Management, Investment & Development shows that London's population is likely to have an 11% increase and reach 9.78m by 2026, which means there will be an extra one million people living in London.

According to a report from JLL there are 225,000 home shortfalls in the last 10 years in London. Price Water House Coopers (PWC) claims that the house price-to earnings ratio will continue to grow and that even if it were possible to create 250,000 new homes per year, this would be unlikely to solve the problem of affordable housing today, because there have been so many decades of under supply.

(file:///Users/apple/Downloads/pwcukeo-section3-housing-July-2017.pdf).

London's under supply is illustrated in Figure (6.7).

Figure 6.7: London's Under Supply Problem (Source: JLL, DCLG, London Plan)

6.3 Case Study Selection

The top ten current MURPs in the UK are presented on Table 4.3 in Chapter Four, of which three projects (Queen Elizabeth Olympic Park, Kings Cross and Nine Elms) have been selected for research.

Proposed evaluation models as discussed in Chapter Five investigates urban regeneration projects based on three main criteria of funding, institution and project.

The selected projects are the Kings Cross Development (KC), Queen Elizabeth Olympic Park (QEOP) regeneration and the Nine Elms Development (9E). Table (6.3)

Project	Location	Size	Partnership	Scope	Funding	Land owner	Construction Start date	First phase completion	Completion date
QEOP	East London	607.87 ac	Public	Urban regeneration	Public	Public land ownership	2009	First venue re-opened July 2013	2012 phase one finished
9E	Central London	481.85 ac	Public Private	Urban regeneration	TIF	Various land owners	2014	Phase 1 completed by 2015	2029
KC	Central London	67 ac	Private	Urban regeneration	Equity Senior debt Recycled receipts	Single private land ownership	2007	Phase 1 completed in 2014	2020

Table 6.3: Selected Case Studies, (Source: author 2014)

6.3.1 Justifications for the Choice of Case Studies

The main justifications for the case studies are their comparability in terms of their contexts, objectives and location within London. Special characteristics relating to each project provides the opportunity to assess these MURPs holistically.

Kings Cross has been selected since:

- Its first phase of project was already completed by the time research began
- It is a single private land holding
- It is privately funded

Queen Elizabeth Olympic Park has been selected because:

- It has a unique specific characteristic as a post event regeneration scheme
- It is a single public land holding
- It is a legacy project and has special attention and support from the government

The Nine Elms regeneration project has been selected because:

- It is an innovative funding model (using TIF)
- It is a current project, which had only just started at the time this research began
- It involves a public-private partnership where the governments has no land ownership interest
- All of the development site in the area is under different ownerships, all of which are from the private sector

6.4 Kings Cross

6.4.1 Kings Cross Development

Kings Cross had been the subject of a number of development proposals, dating back to the 1980s. One 1980s scheme involved a bigger mega project, organised by a consortium within the London region, and Fosters was appointed the architect. That served as a basic rationale for this current approach for Kings Cross which was promoted by the British Rail Property Board.

Early plans for redevelopment ‘to move the Channel Tunnel Rail Link from Waterloo to St Pancras became the catalyst for change. The landowners, London and Continental Railways Limited and Excel (now DHL) decided to

develop the land (Kingscross.co.uk, 2016). Later in the 1990s they came to a more realistic approach in terms of scale, risk, infrastructure and cost. The plan adopted an organic approach and was promoted by the successors to British Rail, who were private entities, and also the National Rail which still owns British railway land (Interview, 2014).

6.4.2 Socio-Economic Profile of the Area

The socio-economic profile of the Kings Cross area and the wider impact zone is discussed below. This information refers to the time before the regeneration took place; it is sourced mainly by material from the affected boroughs of Camden and Islington.

- **Employment**

The 2001 Census reported that there were 15,112 'economically active' people living in the Central Impact Zone. (This includes self-employed, short-term unemployed and full-time students with jobs). This equates to 55.9% of all 16-74 year-olds in the Central Impact Zone. 10,422 of these people were working, of which 8,597 (82.5%) worked full- time and 1,825 (17.5%) worked part-time. Unemployment rates in King's Cross before the regeneration took place were (and have historically remained) consistently above the national and London averages. This has been recognised by Camden and Islington Councils in their support of projects targeted at specific excluded groups and their recent support for local Intermediate Labour Market Initiatives. Applicants to this scheme are keen to work with the Local Authority and its partners to help promote local employment, jobs and enterprise (Camden.gov.uk, 2016).

- **Deprivation**

The Index of Multiple Deprivation (2000) covers six domains, namely employment, income, education, health, housing and access. Ten of the twelve wards (2001 ward boundaries) in the combined Central and Wider Impact Zones are ranked within the 20% most deprived areas in England (Index of Multiple Deprivation, 2000). The following four wards in the Central Impact Zone are amongst the 10% most deprived in England:

- Somers Town - within the 5% most deprived
- Holloway - within the 10% most deprived
- Thornhill - within the 10% most deprived
- Kings Cross – within the 10% most deprived

- **Demographics**

The population of the area is approximately 73,580, living in 33,925 households (ONS, 2001). Accordingly, the area has a population density of approximately 2.39, with 2.17 people per household (pph). This is marginally higher than the Camden and Islington average of 2.15 pph. The area has a similar age profile to other Central London locations with around 17% of the population aged under sixteen, 69.5% aged 16-59, and 13.5% aged 60 or over. In the area young adults (16-24) constitute an average of 17.6% of the population including UCL student accommodation and the area has slightly more females than males.

- **Ethnicity**

Kings Cross ward has the largest proportion of ethnic minority residents of any of the wards within the Central or Wider Impact Zone wards, with those classified as white British constituting only 37.2% of the population.

The principal ethnic minority groups in the Central Impact Zone are Bangladeshi (over 15% of both Kings Cross and St Pancras & Somers Town wards, over three times the Inner London average, and 4.8% of Caledonian ward, twice the Islington average); African (10.9% of St Pancras & Somers Town ward); Chinese (3.8% of Caledonian ward, over twice the Islington average) and Indian (3.34% of Kings Cross ward, compared with the Camden average of 2.31%) (ONS, 2001). Associated with this level of ethnic diversity is a correspondingly high level of religious diversity. Compared with the Inner London average, the central impact zone has fewer Christians and almost twice as many Muslims. Currently around 22% of both Kings Cross and St Pancras and Somers Town wards are Muslim, contributing to a total of around 6,600 people within the Central Impact Zone as a whole (ONS, 2001). This has significant implications in terms of family and household size, demand for community facilities and places of worship as well as potential access to employment.

- **Income**

Factors limiting a person's income relate to education and skills, employment opportunities and dependence. Income levels amongst residents in the Central and Wider Impact Zones fall below the London average, with high income support dependency and low incomes. In 2002/03, the Central Impact Zone had

66% more households living on incomes in the lowest bracket (£0 – £5,000) than the average for London. A significant proportion (56%) of households in the central impact zone had a total income of less than £25,000, compared with 35% of households in London as a whole (CACI, 2003).

- **Housing**

Housing tenure in the Central and wider impact zones is markedly different from London as a whole, containing high proportions of public housing and low proportions of open market housing. In the central impact zone, the 2001 Census reported that 40% of households lived in housing rented from the Council and 18% in housing rented from housing associations. Lack of available good quality affordable housing is a persistent problem across Inner London; the Kings Cross area is no exception, despite the preponderance of public and Registered Social Landlord (RSL) stock identified above.

- **Crime**

The Camden and Islington boroughs have higher levels of recorded violence involving all types of offences in comparison with the London average. Kings Cross has a particular reputation for drug offences, street prostitution, robbery and violence.

6.4.3 The Site

The Kings Cross development is being built on 'a 27 hectares area of land in central London, situated 4 km north of Charing Cross and 4.5 km northwest of Liverpool Street in the City of London. It rises upwards from Euston Road to the Regent's Canal, which cuts the site in half, and then continues to gently slope upwards to its boundaries' (https://casestudies.uli.org/kings-cross). The scheme is situated 'in the London boroughs of Camden (mostly) and Islington and is bordered to the south by Euston Road and St. Pancras International and Kings Cross rail stations. Figure (6.8) This transport hub is expected to support 63 million passengers a year from 2020 and offers access to six London Underground lines, two national mainline train stations, and an international high-speed rail connecting Eurostar passengers to Paris in just over two hours (Uli.co.uk, 2017).

Figure 6.8: Boundaries of Kings Cross Development. (Source: kingscross.co.uk)

There are two natural features that are situated close to the King's Cross site: the Regent's canal, which runs east to west, and the Camley Street Natural Park, which lies on the canal's western bank. Although technically outside the MURP site, developers have aimed to incorporate both features into the ambience of the development, calling this policy a "blurred boundary" approach that captures the spirit of the Kings Cross MURP, combining public realm with green space. (Uli.org, 2017).

6.5 Queen Elizabeth Olympic Park

6.5.1 Queen Elizabeth Olympic Park Development

Much of Stratford itself had become railway land, full of tracks and warehouses owned by London Continental Railways, which they offered on a free loan lease for many years to the market for development schemes (Interview, 2014). Where the stadium is now located was once the biggest railway engineering hub in Europe. The area also hosted several chemical factories. When the docks closed, people who lived there worked in those businesses, so that the actual population was higher half a century ago than it is today. In the late 1970s, after the closure of the docks, the poverty of the area become exacerbated. The area suffered from unemployment, a weak economy

and physical decay, leaving behind much vacant and polluted land. As a result, the community become one of the poorest in London. Figure (6.9)

By the beginning of 1980s, this increased deprivation raised two questions. First, there was an urgent need to address the severe social and economic problems facing what was now a disadvantaged area. Second, London was continuing to grow, and lacked the space for growing businesses and for the residential homes that would have to accompany them, and Stratford appeared to offer opportunities for urban expansion. The first phase of development was the Canary Wharf regeneration, begun around 35 years ago.

Figure 6.9: Known as 'The Buildings', Manor Road Buildings was a run-down residential area in West Ham. Back in the 1960s, local children had little to do but play on the nearby bombsite and wasteland. The wall says: "Manor Road Adventure Playground" (source: Telegraph.co.uk).

After the development of Canary Wharf, there were plans for Stratford, although it was less easy to see how a similar development could take place there. The main challenge was how to utilise public investment in order to attract private sector businesses to invest in Stratford. The experience of Canary Wharf was negative for local people, as they viewed that regeneration as beneficial to the rich, rather than to the ordinary people. Therefore, the first task was to announce the proposal for Stratford in such a way as to make local

people enthusiastic about the change to prepare them for the opportunity for change (Interview, 2014).

From the outset, the idea of bidding for the 2012 Olympics offered the opportunity that the event might trigger a long-lasting regeneration of the area, attracting public sector investment that could have a major impact. First, the land could be decontaminated, prior to development – and there were other changes such as the removal of electricity pylons, that would improve the appearance of the area and laid the groundwork for the upgrading of Stratford Rail and Underground station. Second, the area could help accommodate the growth potential of London, providing a new site for homes and jobs. Third, all these improvements would benefit local people and help ameliorate the area's social and economic problems.

The regeneration of Stratford was not something that would happen simply for the 2012 Olympic but which could be part of a longer-term 25 year strategy of regeneration. It was envisaged that an Olympic stadium would help promote speedier progress. Subsequently, the Olympic Delivery Authority was set up as a governmental agency to oversee the implication of the Games. This involved acquiring the land and the assembly of park and venues. Upon completion of the Olympic Park in 2012, the Mayor of London established the Legacy Development Corporation.

6.5.2 Socio-economic Profile of the Area

The socio economic profile of the Queen Elizabeth Olympic Park is discussed below. The statistics are taken mainly from Stratford, as well as from the wider borough of Newham, compared with London and with England as a whole.

Table 6.4: Stratford and New Town Ward 2001 Census Data,
(Source: royal geographic society)

- **Employment**

Unemployment rates in Queen Elizabeth Olympic Park before regeneration were above the average unemployment levels. The employment rate was '11% for the four Growth Boroughs', which were more low-level, and 'had fewer managerial employees than the London average'. The area has 'a greater potential workforce, with lower levels of retired people than the London average'. The statistics shows 'an increase in service sector industries and a decline in manufacturing and employment land' (London Legacy Development Corporation, 2014). 64.2% of the population are employed in the sub region compared with 70.4% in London, which equates to 77,000 fewer people in employment in the host boroughs.

- **Deprivation**

The most overwhelming challenge that the area faces is the sheer scale of its disadvantage, compared with London and the rest of the country. Together, the host boroughs account for the largest cluster of deprivation in England and Wales. This consequence is a disparity between the host borough sub-region and the rest of London, which exceeds all other regions. The area has a very low existing population of 10,273, with the average age at 37 below the London average. The affected areas also have an above London-average proportion of people with no qualifications and lower than London-average health levels, with life expectancy also below London and UK averages (London Legacy Development Corporation, 2014). East London has some of the most deprived local authority areas within England: Hackney, Newham and Tower Hamlets have some of the highest concentrations of deprivation (London Legacy Development Corporation, 2014). Also regarding education, the area has low levels of adult skills compared with the London average, with 17.6% of adults in the host boroughs having no qualifications, compared with 11.6% in London (this gap equates to 67,000 more people with no qualifications). Hackney residents have some of the poorest health outcomes of all the London boroughs, 13% of working-age adults have a limiting illness

or disability considering the figure for London is 11% and 26% of 11 year olds are obese compared with 23% across London (Aldridge et al, 2015). Also, male life expectancy is lower than the average for London, at 78.2 and 80 years respectively. These figures make Hackney the second or third worst performing borough in London, depending on the indicator (See table 6.4) (Aldridge et al, 2015).

- **Demographics**

There is a high proportion of inward migration of deprived families into this area who are attracted due to the low-cost rented accommodation that is available (London Legacy Development Corporation, 2014).

- **Ethnicity**

The 2011 census reports that the local ward is ethnically very mixed. Just 36% of residents self-identify as White British, with the next largest groups being Other White (16.3%) and Black African (11.4%). The Black Caribbean population, which in the 2001 census stood at 10.3%, has since declined to just 7.8%. (Hackney.gov.uk). The affected boroughs have the largest group of Sephardi Jewish people in Europe, living predominately in the North East of the borough and representing an estimated 7.4% of the borough's overall population. Hackney also has a well-established Turkish and Kurdish community; at least 4.5% of the Hackney population is Turkish (derived from the 2011 Census).

- **Income**

There is a high proportion of low income residents for both Hackney and Newham. These boroughs have the second highest proportion of working-age people as well as the second highest proportion of children in poverty. The boroughs have the second highest proportion of children in poverty in London

(41%), and the second highest proportion of working-age people claiming workless benefits (12.3%) (Hackney.gov.uk).

- **Housing**

The district suffers from overcrowding, varying from 18% to 38% of households in the five boroughs, against a London average of less than 7% (Hackney.gov.uk).

- **Crime**

In the affected boroughs there is a persistently high level of violent crime, well above the London average (29 offences per 1000 population in the five host boroughs, compared with 24 per 1000 in London) (Hackney.gov.uk).

6.5.3 Site

The Olympic Park has been built on 607.87 acres of land in East London. The park occupies an area spanning four east London boroughs: Newham, Tower Hamlets, Hackney and Waltham Forest. The first action which took place was the re-routing of the international railway through the Tunnel, together with the establishment of an international railway station to kick-start regeneration. Figure (6.10)

Figure 6.10: Olympic Park Boundaries (source: www.queenelizabetholympicpark.co.uk)

6.6 Nine Elms

6.6.1 Nine Elms Development

GLA predicted a need for housing and employment growth in this part of London. Due to its low density and its closeness to central London, the area was seen as a very low-density development with the famous power station

issue as its outstanding landmark. GLA decided that this land should be used for high-density housing. Covent Garden market was constructed in 1974, since then there have been many further developments, including refrigeration and a supermarket. Today, rather than simply dealing with fresh food, rented stalls serve central London restaurants by preparing food and delivering it by van within a short time. The nature of the businesses have changed and so the building use has changed with them. When the regeneration started, Nine Elms it was almost entirely industrial, and the policies at the time were very much about maintaining industrial areas. The most obvious vacant site, was the Power Station, which had not been functional for thirty years. The cost of building refurbishment was very high and also the location lacked a fast link to central London; this placed constraints on the area's development. Therefore, the Nine Elms Delivery Team, consisting of five people working from the flower market, was formed to co-ordinate the project.

6.5.2 Socio-economic Profile of the Area

The socio-economics of the Nine Elms and the wider impact zone refers to the period before regeneration took place, and is referenced mainly from the affected boroughs of Hackney and Wandsworth.

- **Employment**

Economically, Lambeth has improved greatly in recent years, particularly in the centre and north of the borough, which includes Vauxhall. Although Wandsworth town centre provides employment, shopping and leisure facilities, many locals commute out of the area to work - mostly to other parts of central London. The 90% of local businesses have ten or fewer employees and this small business sector seems set to improve. Although a high proportion of the population are highly skilled and have well-paid jobs, roughly 20% are on benefits or are in poorly paid work, particularly in the black and minority ethnic communities. This is indicative of the social disparity of the area.

- **Deprivation**

Social deprivation for both Lambeth and Wandsworth resulted in poor health outcomes; moreover, both wards are lower than the London and national average with regards to health issues such as life expectancy, infant mortality, and premature deaths from cardiovascular diseases and cancer. Other serious

problems locally include mental illness, infant mortality, teenage pregnancy and childhood obesity. Life expectancy in Wandsworth and Lambeth is below the national average. (Wandsworth council, 2016).

- **Demographics**

Local residents are relatively young and roughly 35-40% of all residents live alone, which is much higher than the average level for the rest of London. (Wandsworth.gov, 2016).

- **Ethnicity**

The 2011 census shows Nine Elms to be an ethnically diverse area. More than a third of local residents are from minority backgrounds – generally being comparable with inner London as a whole. Its largest non-white group are Black African (11.8%) followed by Black Caribbean (10.1%). Lambeth, in fact, has the third largest proportion of Black Caribbeans in London, after Lewisham (13.8%) and Croydon (10.6%). (Lamberth.gov.uk, 2012).

- **Income**

The ward is officially classified as severely deprived in income, employment and wider barriers to services (Lamberth.gov.uk, 2012).

- **Housing**

The data for 2008 from the ward shows that is has significant residential communities, with falling population density. Projected population growth for 2018 indicates that the population in Lambeth is set to substantially increase. The area has an insufficient mix and quantity of housing and a limited range of dwelling sizes. The amount of affordable housing is below London Plan Standards (wandsworth.gov.uk, 2016).

- **Crime**

Crime rates for both violent and non-violent crime are much higher than the national average, although the rates are falling – violent crime fell 67% between 2001 and 2007. Domestic abuse is higher than for most of London and chronic drug abuse remains prevalent in much of the borough (Wandsworth.gov.uk, 2017).

6.6.3 Site

The regeneration area spans 227 hectares of central London on the South Bank of the River Thames – walking distance from the Houses of Parliament, Sloane Square, Tate Britain, Battersea Park and Oval Cricket Ground. Figure (6.11)
The district extends from Lambeth Bridge in the north, to Chelsea Bridge in the south, covering the Albert Embankment, Vauxhall and a large slice of north Battersea. Westminster lies directly opposite on the north bank of the Thames. It is by far the largest regeneration zone in central London and includes the last remaining industrial stretch of the South Bank (Nine Elms website, 2017)

Figure 6.11: Nine Elms Development Boundaries (Wandsworth council, 2016)

6.7 Conclusions

This chapter has examined the importance of London as a global city and found that London has become the centre for investment in financial and property assets. It explains that the UK is still one of the largest markets in the world for fund management, and remains Europe's leading centre for fund management. Hence the city is very popular both for investors and for people from all over the UK and around the world as a place to reside, study and work. The chapter has also explained how deprivation and high rates of crime have led to urban decline in some parts of the city, and that much of this decline is focused on unused industrial, and contaminated lands.

The chapter has also shown that the high demand for housing and employment in London has attracted the government's attention, which has resulted in an agenda for urban regeneration in the inner cities, especially on deprived low-density derelict lands, to resolve the issue. The chapter has provided an analysis of the level of deprivation in London of the logic for selection of the three case studies for the application of MURP evaluation framework. One key message emerging from this chapter is that unemployment rates in the selected areas before the regeneration were consistently above national and London averages. This has been recognised by the relevant councils in their support of these projects. The selected wards are amongst the most deprived in England, and they have the largest proportion of ethnic minority residents of any of the wards within the London area. This has significant implications in terms of family and household size, demand for community facilities and places of worship - as well as potential access to employment. Income levels amongst residents in the selected wards fall below the London average, with high-income support dependency and low incomes. A lack of available good quality affordable housing is a persistent problem across Inner London, and especially in the selected wards. The wards have higher levels of recorded violence across all types of offences, in comparison with the London average. Having explained the above socio-economic profile of the three case study areas, the need for a regeneration programme can be seen to be urgent, to fulfil the requirements of the local people and to enhance their quality of life. The

following chapter provides the case study context, where the research was undertaken, focusing on three mega-urban regeneration projects in London.

7| Case Studies

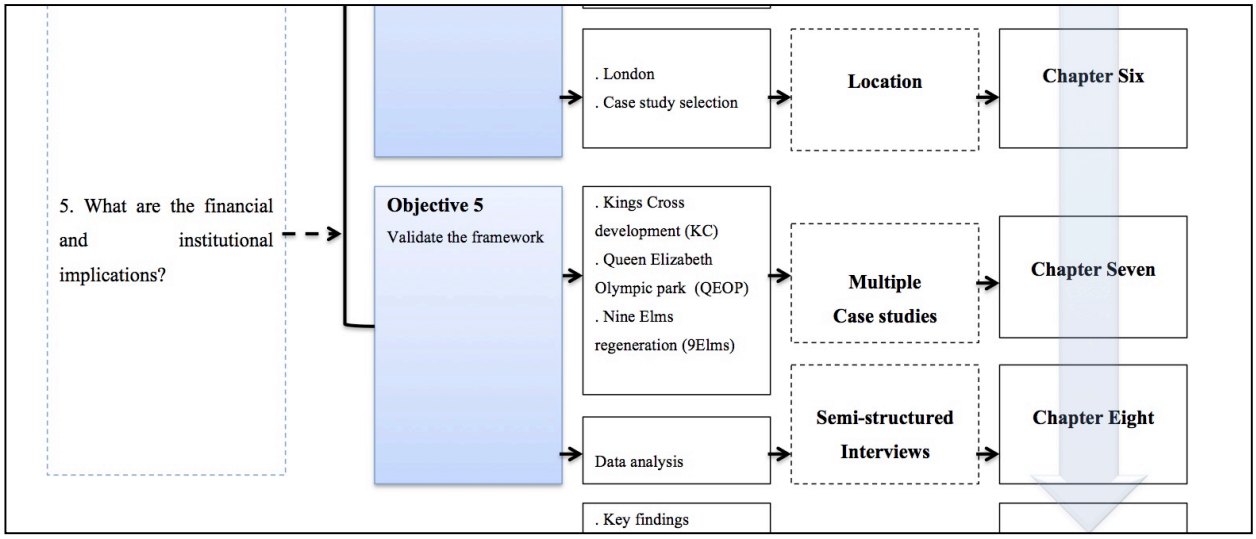


Figure 7.1: Thesis Structure (Corresponding objective, methodology and chapter structure)

Chapter 7: Case Studies

7.1 Introduction

Having developed a MURP evaluation conceptual framework with 'institutional', 'project' and 'funding' components, and corroborated its plausibility, Chapter Six identified the city of London as the location area of the three MURPs as the selected case studies. The purpose of this chapter is to address Objective Five of the research to validate the proposed MURPs evaluation framework as outlined in Figure 7.1. The literature and draft framework suggests that a range of factors influence a project's success, including having a clear plan, co-ordination and proper governance. However, each real estate development project is unique and complex with an individual situs (its spatial location). To deal with some of these complexities, the thesis investigates each project individually to assess the extent to which individual circumstances moderate multiple success criteria. This chapter builds upon evidence from the three case studies, using the second component of the triangulation strategy employed for data collection as discussed in Chapter Four. In particular, this chapter addresses research question five of this research which considers the financial and institutional implications of MURPs evaluation framework. Thus, Chapter Seven implements the inductive phase of the explanatory, sequential mixed methods research. The emphasis is on qualitative information in order to evaluate the MURP models derived from the selected case studies.

7.1.1 Methodological and Conceptual Analysis of the Case Studies

Chapter Seven draws upon three case studies of MURPs located in city of London (Chapter 6). The conduct of these case studies embraces four stages. The first stage is the identification of major urban regeneration projects (Chapter 6). The second stage involves developing the projects' profiles and formulating a typology of MURPs in terms of governance, financing models they imply and completion time and choosing three suitable projects for analysis (Chapter 6). The third stage analyses the selected case study projects in depth from three perspectives of governance mechanisms, project quality

and funding models (Chapter 7). Finally, assessment of the projects' success based on the proposed framework is presented in the current chapter.

To analyse the success of each case study project, the following three methods were employed:

Archival analysis of relevant documents provided by private firms and public institutions involved in the projects (Discussed in chapter 6).
Semi-structured face-to-face interviews with different stakeholders of each project, covering the project background, partnership structure and governance and financing models.
A formal multi-criteria evaluation of each project based on the draft framework. For each case study, between ten to twelve interviews were conducted. To enable the analysis of the qualitative information collected, NVIVO 8 software was utilised in this phase of the empirical investigation.
As discussed extensively in Chapter Three, urban mega-projects are complex, unique and controversial. However, the challenge of how to accommodate and offer sustainable utilities to the many millions of new urban migrants currently arriving into mega-cities is one that must be addressed. Some mega-projects radically transform their environment while others fail. For example, the dereliction of Bangkok's peri-urban canals illustrates the negative long-term ecological consequences of rampant real estate pressure (Davivongs *et al.* 2012), with the failure of the major mega real estate projects in Bangkok created immediately before the Asian Financial Crisis (AFC) of the late 1990s. The Sathorn Unique Tower is still lying derelict, 27 years after its construction commenced. The development was intended to become one of hundreds of high-rise development that were started in Bangkok in the 1990s, but when the AFC struck the Thai economy in 1997, construction stopped and many projects were abandoned. The Sathorn Unique Tower is today known as the "Ghost Tower", and offers a salutary reminder of how large real estate projects can fail, with a long lasting impact on cities. The failure of the poorly co-ordinated, publicly driven Athens Olympic Legacy project provides another example (Rosenthal, S. 2017). Other mega-projects, like the controversial Heathrow Airport expansion, are toying with jobs, tax receipts, landowner uplift bets, hidden kickbacks or legitimate profit, and prestige or disgrace. For Smith

(1979) and Harvey (1989), mega-projects mobilise a coalition of capitalist handmaidens to exploit rent gaps via structural violence and expulsion. For Veblen (1919) and Foucault (1977), mega-projects are a contrivance by powerful vested interests to overcome urban transformation resistance. Notwithstanding conspiracy, 'cock-ups' may also result from macro-economic forecasting difficulties, since mega-project prognosis must contend with architectural, urban design, institutional and geographic peculiarities.

Given these political contentions, at the very least, judgement on the merit or failure of a mega-project must involve multiple ecological, social and commercial considerations. From the urban regeneration literature (albeit primarily managerialist) and preliminary dialogue with arguably compromised 'experts', a draft multi-criteria project evaluation framework emerges. Five key drivers underpin megaprojects' success: smart institutions, quality of projects and innovative funding.

London, with its global status, provides a rich *milieu* in which to investigate the usefulness of the assessment framework. The current research investigated three projects: Kings Cross – Queen Elizabeth Olympic Park - Nine Elms

The following section investigates each of the selected case study projects based on the evaluation framework's criteria: Smart Institution **(Foresight: Intelligence, Resilience, Creativity- Institutions: Governance, Scale, Fit)**, Quality Project (Locales: Community, Baseline, Genius loci- Project: Design, Efficiency, Spacial justice) and Innovative Funding.

7.2 Kings Cross development

Overview

As discussed in Section 6.3, three case studies were selected on the basis of type and structure of partnership, funding model and stage of development (Table 6.4). Kings Cross ('KC') is a £1 billion plus, iconic mixed-use central London regeneration project, anchored on two historical railway stations and

the British Library. In the Victorian era, KC was an important industrial neighbourhood and transport hub. Its central position links the commercial East of the city with the West End retail and entertainment precincts. However, its transport advantages could not offset the post-war demise of the railways. At the end of the 1960s, KC was characterised by industrial blight. Without formal functions, its derelict disused buildings, railway sidings and contaminated land supported a shadow, night-time economy of insalubrious strip-clubs, brothels, bohemians and artists (casestudies.uli.org, 2015). KC's housing stock was either social, other council tenants or catered for lower-income groups as indicated by the Index of Multiple Deprivation Super Output Areas (SOAs)[1] in Figure 7.2. Social deprivation fundamentals and market sentiment that stereotyped the area as 'bad' kept actual rents below commercial uplift potential (Highest and Best Use). Recession thwarted misguided 1980s regeneration attempts, but with the booming property markets of post-GFC London, investor sentiment returned. In 2015, a firm of English urban development professionals (Argent Property Development Services LLP) formed a new partnership (Argent Related) with a US real estate investment firm, and saw its Kings Cross unit trust as a way to realise KC's potential. Project finance involved equity contributions from the original landowners (London Continental Railway) and several pension schemes. In addition, Google and High Speed One pre-let space.

[1] "Super Output Areas" (SOAs) – areas smaller than political wards, containing about 1,500 households each. The mapping shown is based on 2001 census figures (Camden.gov.uk, 2016)

The new initiative constructed attractive new buildings on site as well as having restored some historical building. The project transformed King Cross into a high-density commercial precinct and a London transport hub, which is linked to major London Underground lines; national mainline train stations and international high-speed rail link to EU (Kingscross.com, 2016). Currently Google sits as an anchor tenant, facing its bitter rival Apple across the Thames at Nine Elms development.

Figure 7.2: Local Implantation Plan 2005 - 2011 (Source: camden.gov.uk, 2016)

Until Nine Elms was launched, the 67-acre Kings Cross site was the largest mixed-use London development for generations. The redevelopment project's aim is to include the restoration of historic buildings alongside the construction of new buildings.

> *"It was specifically chosen as the venue for the launch of Power of Place in February 2001 to underline the message that the historic built environment is a key catalyst in urban regeneration." Philip Davies. Director, London Region English Heritage.*

Table 7.1:King'sCross in Numbers, (kings cross webpage, https://www.kingscross.co.uk/)

The project involves a KC property unit trust into which various investors injected capital and their own units. The unit holders are half-owned by the original landowners and half-owned by Argent.

The KC entity, which is a limited partnership, entered into a development management agreement with Argent to carry the development forward. Argent proposed to KC central partnerships board that all property interest be granted free hold on long leases to individual owners or home buyers. Argent remains in charge of the financial arrangements, property and asset management and the development management. Figure 7.3 illustrates the KC partnership structure.

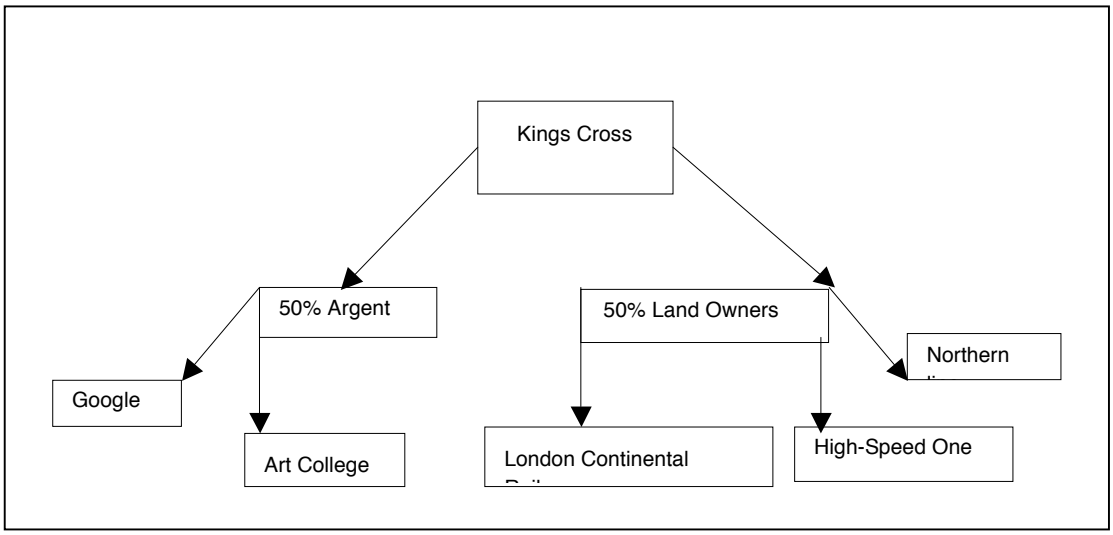


Figure 7.3: Partnership Structure (Source: Author 2016)

As illustrated in Figure 7.3 the structure of the partnership consists of Landowners, being Northern Line, High Speed One (HS1) and London Continental (LC); investors; strategic government groups and developers.

Project planners recognized that to achieve all their objectives, they would need to take a partnership approach directed by a handful of government arrangements. Central to this approach was a rigorous analysis of the strengths and weaknesses of each partner, to help ensure that the project would be delivered on time and on budget, and that its impact would be felt beyond the boundaries of the project (Regeneration strategy, Kingscross.gov.uk, 2016).

Interviewees

Overall, eleven interviews were conducted with major stakeholders in the KC development. The selection was mainly through finding the key stakeholders from the project's home webpage. The interviewees included senior planners, an architect, lawyers, council members and developers (Table 7.2). They were selected based on their relevance of information, availability and willingness to participate in the interviews and provide information.

The process of regeneration has not yet been fully completed at KC, but place making is already having a notable impact on the local residential property market. Figure 7.4 compares the price growth of King's Cross with the prime central London area and with the Greater London area from 2009 to 2015.

	Interviewee	**Job role**	**Company**
1	Respondent 1	Architect	McAslan + Partners
2	Respondent 2	Architect	McAslan + Partners
3	Respondent 3	Chief Executive and Managing Partner	Argent
4	Respondent 4	Director/ planner/ architect	FLUID
5	Respondent 5	Planner	Royal Town Planning Institute
6	respondent 6	Lawyers	Hogan Lovells
7	Respondent 7	Lawyers	Hogan Lovells
8	Respondent 8	Project Manager (Environmental)	Argent
9	Respondent 9	Finance	Argent
10	Respondent 10	Head of strategic development/planner	Wandsworth council
11	Respondent 11	Senior planning director	Camden council, UCL

Table 7.2: Interview list - Kings Cross Development (Source: author, 2015)

Figure 7.4: House Price Growth Compared (source: Knight Frank Research)

Kings Cross development housing properties vary in the three residential buildings that have been created (Art House, Tapestry and the Plimsoll Building) which all have been sold - or are selling well. The 114 apartments at Art House are all occupied, while only two of the 95 units at Tapestry currently remain vacant.

The increase in the scale and quality of retail around King's Cross over the last five years is shown in Figure 7.5, based on KFR research. The retail data takes into account the type of outlet, including restaurants and shops, and rates it according to the popularity with shoppers (knightfrank.co.uk, 2017). The red area on the map indicates the strongest growth in retail rating over the last five years. There has been a large uplift in retail quality since the regeneration took place.

Figure 7.5: Uplift in Retail Quality 2010 vs 2015 (Source: Knight Frank Research / CACI)

The regeneration of King's Cross has created a new residential centre as well as an exciting commercial centre for London which has attracted famous firms such as Google, Universal Music and Louis Vuitton to open their UK headquarters in the area (Figure 7.6).

(Source: KFR, 2017)

7.2.1 Smart Institutions – (Foresight: Intelligence, Resilience, and Creativity)

The literature review (Chapter 3) under-pinned the draft framework (Figure 5.2) as a basis to evaluate Mega-Urban Regeneration Projects. As per the draft framework, one of the principles for successful development was the need for a clear vision. It is, therefore, necessary for the thesis to investigate archival material in the public domain to check the extent to which Kings Cross met these criteria.

Aside from its obvious commercial objective of making an adequate return for investors, material published by the King's Cross development espouses several public realm enhancement objectives, as outlined below (source: kingscross.co.uk, 2015):

- Connectivity connecting the public realm,
- Regeneration
- Sustainability of both commercial and residential area, as well as enhancing the area as a whole.
- Railway and station repair as well as refurbishment of historic buildings.

> "Respondent 1: *We didn't have any measurable objective criteria; it was more qualitative objects such as accessibility, connectivity, ease to connect the station and public transport, walking cycling, also making sure the underground, over ground and all those connections work well together. The aim was to create a well-connected public realm."*

According to the planners, the main goal for King's Cross Central is "to devise and then deliver, over the next 15 or so years, an exciting and successful mixed use development; one that will shape a dense, vibrant and distinctive urban quarter, bring local benefits and make a lasting contribution to London." (https://www.kingscross.co.uk/media/Principles_for_a_Human_City.pdf).

The creation of KC required vision, creativity and resilience; it was intended as a place-making development led by infrastructure. The vision for KC development was to create a wide range of activities to ensure that people who

live and work in KC do not see themselves being limited by the buildings. To achieve this aim, the project spent a great deal of money on centring the place and activities around the public realm, so that people see it as a piece of London from its inception, rather than waiting towards the completion of the project.

> *"Respondent 3: Most Mega-Urban Regeneration Projects over the years usually end up broke, so we had this consideration on how can we fund this, phase it and de-risk it to not over extend ourselves to position where the project faces risk and loss of the investment. "*

London Continental Railway, the London Borough of Camden and King's Cross Partnership jointly published a booklet (2003) called 'Principles for a Human City' (https://www.kingscross.co.uk/downloads) to give further definition for the future regeneration of King's Cross. The ten principles are as follows: 1- A robust urban framework, 2- A lasting new place, 3- Promote accessibility, 4- A vibrant mix of uses, 5- Harness the value of heritage, 6- Work for King's Cross, work for London, 7- Commit to long-term success, 8- Engage and inspire, 9- Secure delivery and 10- Communicate clearly and openly (https://www.kingscross.co.uk/media/Principles_for_a_Human_City.pdf).The Principals for Human City confirms two pillar of the proposed framework; smart institutional and the quality project.

> *Respondent 5: "The Principal for Human City was based on the quality side of regeneration which is about transformation and place making. It shows they don't see it purely as economic or numbers; they saw it as place making mainly."*

> *Respondent 4: "The way Kings Cross development happened was more like software, there wasn't the usual thing of development where the developer comes in, builds a building, and sells it to the end users. It all seems to be a long-term process of changes and the developer needs to see that for that environment to get through."*

	Connectivity	International direction	Value in project	Transformation	Place making	Create Whole area	Preserve heritage	Mixed use vs. Commercial development
Project vision	100%	70%	50%	100%	100%	100%	50%	100%

Table 7.3: KC Vision from the View of the Interviewees (Source: Author, 2016)

Table (7.3) shows the respondents' ideas regarding the KC development and important key visions. The percentages represent the number of respondents who find each criteria as part of the KC development's vision.

The views of KC key stakeholders' respondents with respect to the overall project vision was to create a dissected place for London for the use both of European nations and the local community; it, therefore, needs to connect to north London and also to the outside world. In addition, many respondents noted that the idea for KC was to create a new business location for London; a place where people could live and work outside the financial district centre. Having layers of culture, identity and well-being differentiated it from a purely business/office district like Canary Wharf. It was important for Kings Cross to maintain cultural diversity and to incorporate the Regents Canal.

Another criterion identified for successful development was a well-informed and forward-thinking planning system, underpinned by robust data collection. Progressive development plans should articulate how the project will both contribute towards resilience and enhance local creativity. To achieve success, the project must focus on enhanced system 'resilience' and local 'creativity'. Resilience is 'the capacity of the system to absorb disturbance and reorganise whilst undergoing change to still retain essentially the same function, structure and identity' (Forbes et al 2009). For Wilson (2014), resilience is a blend of social, economic and environmental capital that strengthens communities. Nevertheless, identification questions remain about 'which communities' are strengthened. For Hausner (1993: 526), unsustainable regeneration is 'short-term, fragmented, ad hoc and project-based and without an overall strategic framework'. Wealth inequality and over-dependence on fossil fuel undermine community resilience.

A sustainable MURP begins with robust capital and space market intelligence to diagnose urban under-performance, conceive solutions and realise future

financial benefits (Brookes 2013; Vanolo 2014). Its strategic focus is on projects that enhance urban resilience and community creativity. (Freedman 2014).

Kings Cross development aims to give children the opportunity for an advanced education which had not previously existed in the area, and to train local adults and help them to find employment. The socio-economic impact of the project was very important, and become one of the fundamental aspects of the KC master plan.

> *Respondent 4: "When we used realistic master planning, it's not just the physical need to understand all the organic chemistry of life, which forms by changes. Consequence of that is we recruit jobs on site for local people, we have one stop office on site where key members of Argent will become governors of Kings Cross Academy which is a voluntary work".*

In order to create a robust planning model, it is important to implement innovative models and techniques. Models used today as a tool for urban planning can help improve understanding of the complex urban organism. Models represent the most important relationships in the system and facilitate the generation and comparison of alternative planned future population, employment, retailing, transportation and land use (Chorely et al, 2013).

For the Kings Cross development, all techniques were used in the model, including Environmental Impact Assessment, transport modelling, impact on community and impact on local housing and jobs.

> Respondent 3: "*We used all those standard tools. The key one was an Excel spreadsheet, which allowed us to monitor activities of the project moving forward, combined with the GIS. They are on a plot-by-plot basis and you can say exactly what legal arrangement they have and what infrastructure allowances are made plot by plot. "*

Another technique employed by KC was scenario planning; this entailed looking at the area from a tourist and a resident perspective. The findings were presented in workshops and used for game simulation and role-play to

determine what could happen and how the project might look in 20-30 years' time. After the master plan was developed, consultation engagement techniques were employed, including pop- up events, walk-and-talk, mapping exercises, feedback and sessions with local people about the scheme and what matters to them. (Interview, 2014)

> *Respondent 4: "Argent signed up to the idea that you had got to get all the component work, physically, socially, economically, politically, situational, locationally, culturally and everything to make a place work. "*

7.2.2 Smart Institutions (Institutions: Governance, Scale, Fit)

The second driver of MURP success, according to the proposed framework, is SMART institutions that aim to ensure quality growth and avoid the project becoming either predatory or extractive (Huston, Rahimzad and Parsa, 2015). Achieving this requires forward planning, along with resilience and creativity, an appropriate use of space and a highly collaborative approach (Huston, 2015). Smart institutions are clearly structured and well-governed with tight oversight control mechanisms.

The Kings Cross partnership comprises three boards. The first is Argent's board, which has a management focus, overviewing the performance and key decision-making, Argent reports to Kings Cross Central Partnership on a monthly basis and responds to questions around new buildings' tenant environmental issues, finance etc. (Figure 7.7).

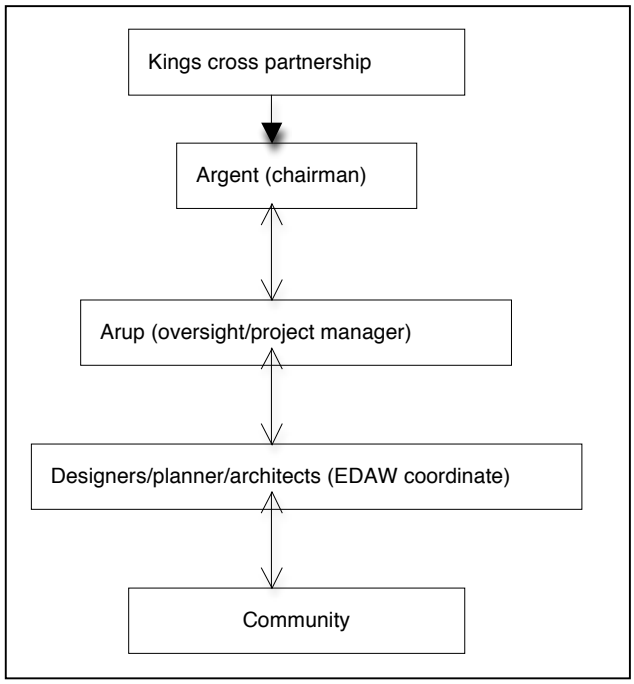


Figure 7.7: Project Board Structure (Source: Author 2016)

Argent is the developing manager with the control of 50% of the board of directors, acting as a Kings Cross partner. Also it provides the Chairman of the Board of directors, therefore the project is controlled 50% by landowners and 50% by Argent.

> Respondent 4: *"Argent does not see their role as merely a property developer who only make money out of property. They wanted to invest their money into the area to the advantage of local people and different stakeholders. "*

The Second Board is Arup which is tasked with the oversight role, regarding who should be the engineers or other practitioners, as well as functioning as a project manager. The third layer comes to the designers and Fluid (the latter being a company dealing with urban design, master planning, regeneration strategies and development strategies), looking to build and support dialogue between developers, community and the end users. The design teams were at the heart of the project, co-ordinated by EDAW, an American group with experience of understanding policy and co-ordination tasks with other boards. Regarding the oversight accountability, Arup was responsible for this as the project manager. Fluid also gathered feedback from the community and reflected this back; this meant that the project was able to combine bottom-up and top-down approaches from Arup.

Concerning the stakeholder's accountability, Argent put forward a proposal. Theoretically, when a business plan is adapted, stakeholders are able to commence oversight, feedback and control mechanisms around the agreed business plan, and to continue this every year. Argent was given the authority to physically build and then to return to the board on an annual basis to revise the business plan. Within the planning process in 2005-6 there were whole sets of targets and outcomes through Section 106, regarding local employment, schools, and so on which Argent was obliged to measure against the long-term financial criteria. For KC development the key approaches regarding stakeholder's accountability are the initiation of quarterly Impact Group meetings hosted by Camden Council.

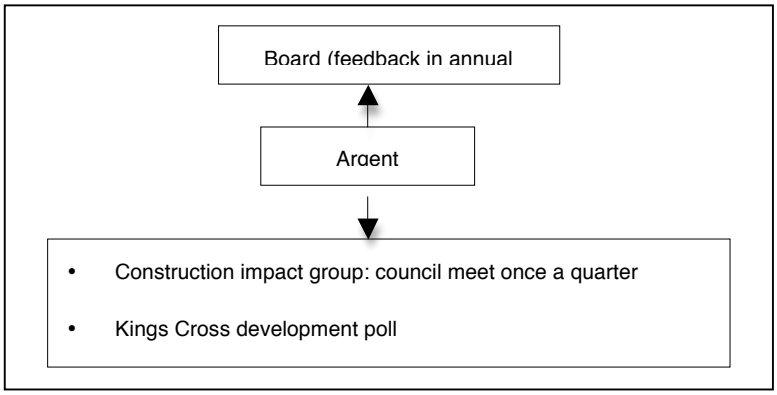


Figure 7.8: KC Board Structure, (Source: Author 2016)

This provided a chance for local residences, local businesses and interested parties to meet and hear about the development and all the construction aspects of the project in which each party would have a copy of reports on the development site's air quality, noise and related issues (Figure 7.8).

> Respondent 4: *"Institutionally: We can openly speak with Islington and Camden Council to try to get as transparent as we could be. We could also have access to the senior group, planners, and housing officers. We had the ability to meet with those people who were the most informed officers there."*

> Respondent 4: *"Spatially: Regeneration boundary is the 'red line' here but there is an area of impact which lives beyond that – the surrounding neighbourhoods. They would be affected more or less directly, sometimes*

physically or secondarily by traffic, when the road was constructed, and also thirdly in terms of socio economic impacts."

Regarding the stakeholder's co-ordination at national, regional and local level at KC, there was a great deal of engagement with the local council and the City of London to ensure that the development is appropriate and that consultation is taking place with the local public and businesses.

> Respondent 3: *"It is at local level at the extent of the planning mechanism. Section 106 is the key legal metric required to deliver. Kings Cross requires more to deliver. For instance, we published sustainability construction which we measure ourselves against market metrics."*

In terms of a partnership agreement, Argent's bid for the Kings Cross development was accepted after six months of negotiation between the landowners and Argent to create a joint venture and with the unit trust's general partners.

For the Kings Cross development to happen, Argent did not simply come in and buy the land, but built a partnership with existing landowners (a logistics company, Network Rail and a few small landowners) rather than displacing them. Should one of the partners as a shareholder within joint ventures want to cash in, they would be able to sell their shares or bonds on the stock exchange, or other partners could purchase it.

> *Respondent 9: "We just didn't buy the land, we put it in partnership and valuate it within our Corresponding rules. We negotiate what we should gain out of the project, what our profits are, and we then manage that as an asset over time."*

Other issues discussed with stakeholders include business, social infrastructure, possible acquisition strategies etc.

> *Respondent 3: "We have lots of stakeholders and it was organic and experimental. We are not shy to say we don't know what your idea is. It was an open thinking box. "*

Emerging Issues (Smart institution)

Having considered the available archival material in the public domain, as well as the responses of the interviewees, it seems clear that the developers of Kings Cross have adopted some robust and creative planning techniques, using novel models and techniques for planning the area. The project has a long-term vision and has considered scenario planning from tourist and resident perspectives. On balance, the archival and interview evidence suggests that Kings Cross showed good foresight when formulating its strategy. The study has suggested that place-making has been the main focus of the project.

Argent as the developer of KC established the partnership with the existing landowners of the area and formed the Kings Cross Partnership. This acts as a single body to govern the organization with a strong institutional arrangement, which looks very robust and with no overlapping. One reason for this may be the absence of a governmental body's involvement and the fact the project is being carried out entirely by Kings Cross Partnerships.

7.2.3 Quality Projects – (Locales: Community, Baseline, Genius Loci)

The third criterion identified in the proposed framework specifies that a MURP should have strong and resilient project management.

As Putnam (1995) states, cities are made for people, and people are the main actors of society. The network of relationships and norms establish appropriate ways of behaving, creating a sense of trust that enables people to rely on others – and all of this results from systematic face to face associations, enabling participants to act together more effectively to pursue shared objectives. Putnam sees voluntary and community association as the key source of capital.

As part of planning permission for each project, the developer has to demonstrate to the local authority that they took on board many issues, including the hopes and aspirations of the local community. For the Kings Cross development, Argent published a document in 2004 for regeneration; in this they consulted the community about their views about the project. Besides that, Argent took the Martini approach, similar to the Martini advertisement

slogan of “anytime, anyplace, anywhere”; the idea being that the KC team are available for consultation at any time. KC also established the Kings Cross Centre - a recruitment hub for local people. It helped recruit local people for employment during the construction phase and other business sectors, including food, retail and hospitality.

> *Respondent 3: “The community asked for three things: clean, safe and accessible for them and providing opportunity for their kids. And we met their expectations.”*

Before the redevelopment was implemented there were very few local residential houses on the site, but at the beginning of the project, KC built a number of affordable housing and this now forms KC’s own community on site.

Another aspect was to involve the community in project activities, including partnerships with local residents and schools. Argent asked Fluid to explore the conditions on the ground for young people. They achieved this by seeking advice from small groups and advisory panels of local people, and by consulting residents who were also present on the project board. Working from the assumption that this project would take ten to fifteen years to complete, they noted that local people saw young people as the main group who should benefit from the project.

The KC area has a history of providing a place for destitute, homeless people; and also young people drawn into drug addiction and prostitution at a very early age in the KC development zone. To address this, a Young Persons Parliament was established in Camden, where Fluid arranged the consultation and took part in negotiations and dialogues with key stakeholders. (See socio – economic information of the KC area in chapter 6)

> *Respondent 4: “I think both Argent and Camden council had an active role in enabling this to happen. Besides this, it was more like software, there wasn’t the usual thing of development where a developer comes in, builds a building and sells it to the end users. It all seems to be a long-term process of changes and the developer needs to see that for that environment to get through.”*

According to many interviewees, a proper baseline investigation of the area was undertaken prior to planning.

Regarding the contribution to local employment creation, Argent established a centre where people are able to access job vacancies for local people, and particularly for those interested in finding work in construction to work on the scheme.

A major event was held, free for the public to attend, and which aimed to make the public more familiar with the history of the area, as well as involving community groups in learning about the Victorian era, with its industrial land, steam trains, and the general heritage of the area. About 3000 candle-lit pumpkins covered the canal side steps in a living installation; people were invited to carve or add their own Halloween masterpiece; this added to the cultural meaning of place.

> Respondent 11: *"This part of London is what people love now, many people come to this area and this creates value for our people around this area, residential value. For restaurants, it's all about making the place and also making it sustainable, more than just pure environmental improvement."*

7.2.4 Quality Project (Project: Design, Efficiency, Spatial Justice)

The fourth criterion identified within the MURP evaluation framework was that the project should be appropriate and well-designed.

As Bengt Andersen (2016) states, urban investigations have focused on the role and meaning of architecture in urban restructuring and transformation, turning attention away from the study of architectural projects as signs and symbols in themselves, towards an investigation of the social production and social construction of architecture.

The Project design consideration for the Kings Cross development was mainly led by the idea of a public realm, since places are spaces that matter significantly.

Respondent 3: "The most important thing we ever produced was this idea of a vision of what Kings Cross is going to become as part of an A to Z of the city of London when it is finished. So basically we drew this from the start point; none of these streets, nor the squares existed before. This idea of a permanent piece, this is part of London we wanted to be remembered for. This is part of London, which has created other great estates - for example the Portman Estate or the Crown Estate. That was the major vision for the place: the peaceful sustainable city."

The aim for KC was to have first-class buildings for people to live and work, and to have high quality architecture, although the idea of place-making remained a critical objective for the project. The indication was to have **a** mixed-use development, making sure the cultural integrity and assets of the area are in place as well.

Respondent 4: "One other thing to consider is that they didn't want shiny new buildings,"

In terms of building efficiency, most office buildings at KC were BREEAM rated, all of them have central district heating, creating a power engine and electricity for the whole project. None of the buildings has its own boiler, which is the BIO generation that provides hot water and electricity, and in future a cooling system will be added to allow for air-conditioning.

Respondent 9: "For the building efficiency we have achieved brand new BREEAM awarded (86%) new construction for our 1 per square office. We do have some carbon emission targets to achieve - for example all the buildings have to be 50% better than part L - having consideration for building envelope, the passive design, the use of facade natural ventilation etc."

Another criterion identified for successful development was to consider the urban realm as the basis of project design. Around 40% of the 67 acres of the whole Kings Cross area is deliberately used for public realm. The intentions were to make a green infrastructure, which helps well-being but also creates spaces where people can engage.

In terms of parking, no on-site car park was included since the idea was to preserve as much public realm as possible, but a vast amount of cycle parking was provided, as well as ensuring that buses connect the site from north to south. Also there is a strong connection between east and west - provided by the canal and the station.

Emerging Issues – (Quality Project)

The findings of this study suggest that two main objectives of the Kings Cross development were the urban realm and place making; these have significantly influenced local people, many of whom now like to spend their time at Kings Cross to live, work and explore.

The planners have been very creative and determined when informing the community about the project and its future plans. However, the question regarding the previous community and residents of Kings Cross since before the project began, remains unanswered.

7.2.5 Innovative Funding

The fifth criterion identified for the sustainable MURP was an appropriate funding structure. In every urban development the success or failure of the project depends on the financial viability of the proposed scheme. Development proposals are prepared on the basis of known costs and values; if they move out of being synchronised, the effect on the development equation can be dramatic (Berry, 2013).

> *Respondent 9: "The big challenge about Kings Cross and many regeneration projects is that because there is a lot of infrastructure and you cannot borrow against it does not produce any income and so you have to fund the infrastructure through cash resources or equity."*

Kings Cross funded the infra-structure through cash and recycling it. Then, for the rest of the development, money was borrowed for each individual building as it came forward. Kings Cross used its own cash resources to fund the infra-structure and, then for the offices and residential buildings, it borrowed money directly. In terms of generating enough equity to fund the infrastructure, Kings Cross sold off plots at the beginning of the project to provide cash, but this was

not enough for the whole infra-structure, and therefore it sold plots to recycle the proceeds back into the project.

> Respondent 9: *"Kings Cross is now on this tipping point that we have now enough money in our bank account so we can now go out to banks and say this is a nice service plot and we need money for direct construction."*

The initial funding for KC development came from equity capital from Argent and the major partners British Telecom's Pension Scheme. Argent had the cash, the equity, by buying the 50% stake in the Kings Cross property unit trust and by buying half of the units from the landowners. Argent then persuaded the landowners to take that 50% and re-invest it back into the partnership and Argent agreed to match the funds as well. The sale of the individual plots to Google and other tenants enabled the recycling of the proceeds back into the project in order to finance the infrastructure. After that, each individual project was funded through bank finance on a project-by-project basis. Upon completion of sale of residential units, the developer used the proceeds to pay back the money into the bank. For the offices, the development loans were to be converted into investment loans when leases have been taken up. Once that income stream commences, then the project was able to move forward from the income generated through the occupied plots.

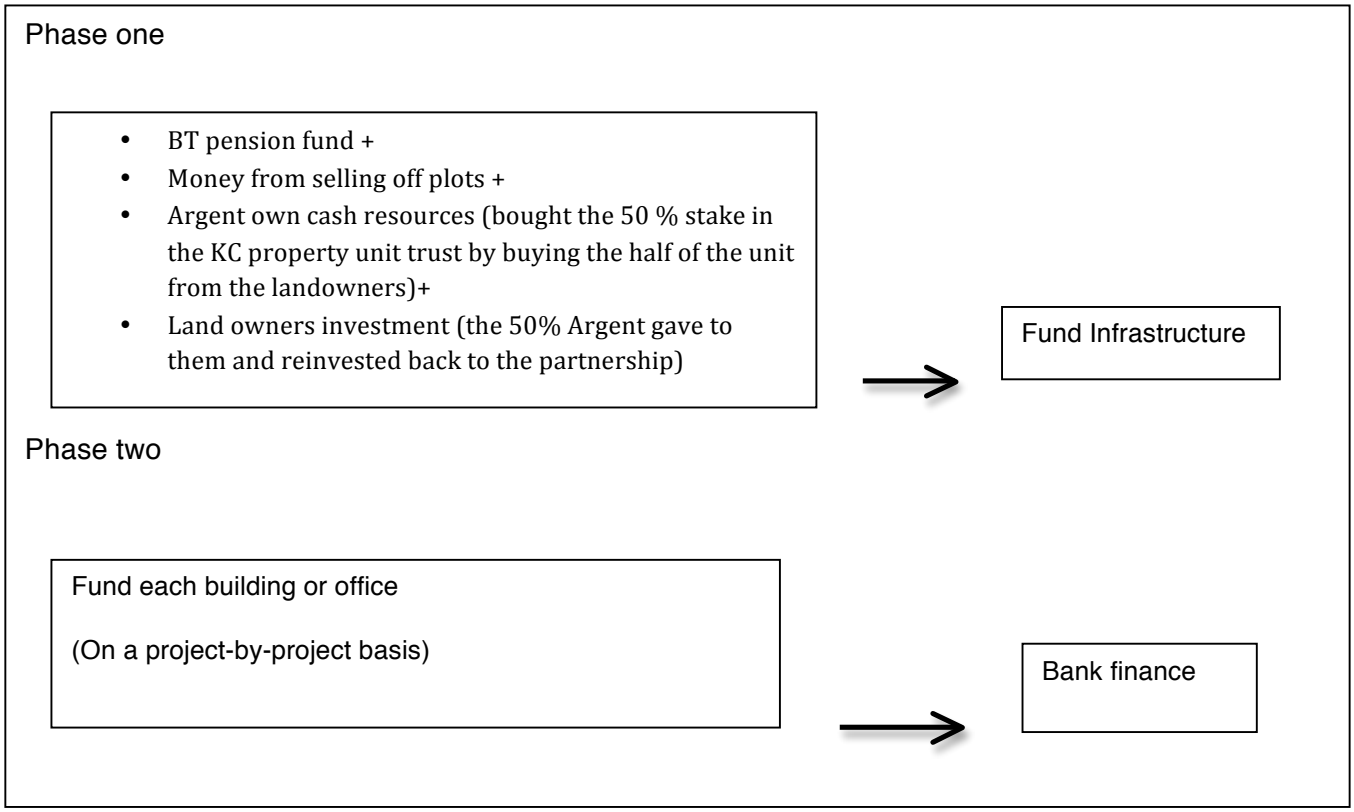


Figure 7.9: illustrates the Two Phases of Funding for the KC Project (Source: author, 2016)

As per the draft framework (Chapter 5), key performance indicators are identified as factors that have an impact on project funding. At the KC project, KPI was achieved simply by signing the lease, and if part of the project was late, the developer was penalized for that.

> *Respondent 9: "There are two types of milestones, tangible and intangible. Tangible milestones make sure the project parts are constructed or occupied or completed. So there is a question around whether the market really recognizes the area has changed. Kings Cross has now reached that point, as the sale of plots demonstrate that.*

> *Respondent 9: "In terms of the less tangible one, which is all about looking at the risk of project, in terms of identifying what are the key factors that moved the project from a high risk infrastructure-led project to a low risk development project, when you are building a series of plots and establishing a market. We tried place-making in order to reach that value point to de-risk the project as quickly as possible."*

The perception of the KC key stakeholders with respect to project risk can be grouped into four different types:

1. Delivery risk in terms of actually getting the infra-structure and getting the buildings built and if there is good construction team a lot of that risk can be transferred to them.

2. Market risks in terms of going forward with what may or may not happen to the market. For that KC is mitigating the risk by having a mixed scheme, including different baskets and these can accelerate or slow down at different points.

> *Respondent 9:"In 2008-9 when we started KC we started lots of public sector uses, university and affordable housing and student housing so that way we attracted much of the market we have at the moment."*

3. Maintaining the cash flow was the project's major risk.

> *Respondent 3*: *"Making sure when we committed to infrastructure we never wanted to face a situation where we were spending more money than we were due to receive from the sales of the plots or other parts. We monitored that on a weekly and monthly basis. And every time we reached a new sale we were then be able to commit more infrastructures. Keeping the cash flow was our major risk.*

4. Development risk is very significant, especially when spending money on a development which people want to occupy, acquire and move into. For example, before the development started, the site was not compelling and nothing had been done to transform it until the University of Art became involved.

> *Respondent 1: "There was a shortage of biocide activities, which delayed the project whilst they waited for the market to get its proceeds. Nothing unusual happened other than development risk, because you are going from nothing to a new development of a contaminated land."*

In the Kings Cross development there was not a fixed business model as the project evolved and the model had to be updated regularly. Initial plans would

have one building coming before another, but with changes in circumstance, the order was often reversed.

> *Respondent 3: "The business model evolves and it has to be updated. If you stick to a particular model the chances will be limited as the more commercial will come forward. It has to be a very dynamic process and constantly updated. It's much more about identifying the important factors and how to de-risk the project and create the best economic circumstances so that the project will succeed. We do that by cracking sense to social infrastructure."*

KC's original investors were the landowners, who are London Continental Railway, DHL and Argent. Recently, Australian Super bought 25% of Argent. This shows how KC is reaching that tipping point where, as an investment, a party wants to secure the holding for the long-term. The project's main investors were KC Limited partnership, DHL, Deutsche Bank, London Continental Railways and Argent Group. All the project's investors have long-term priorities.

> *Respondent 8: "At Kings Cross there is a specific priority around an opportunity of engaging with the community; it is that we try to change the area and make a change to the area. And part of the investment that went to the infrastructure gave the confidence that the Kings Cross area would change and improve over time. This project is an opportunity to get involved with and help accelerate it."*

At Kings Cross, Argent does not merely build but also manages and maintains the assets as the project goes forward.

> *Respondent 6: "Investment priority for landowners was mainly capital appreciation and income. However, Argent has a wider interest, such as urban real estate and place-making. Also the developer's expertise was important because they wanted to prove they can manage such a project and achieve success".*

All investors have to make an appropriate return and this depends on the risk during the project as it changes. At the high end of the project, high expectation

is expected for the return, compared with the back end of the project where the risk profile would be reduced.

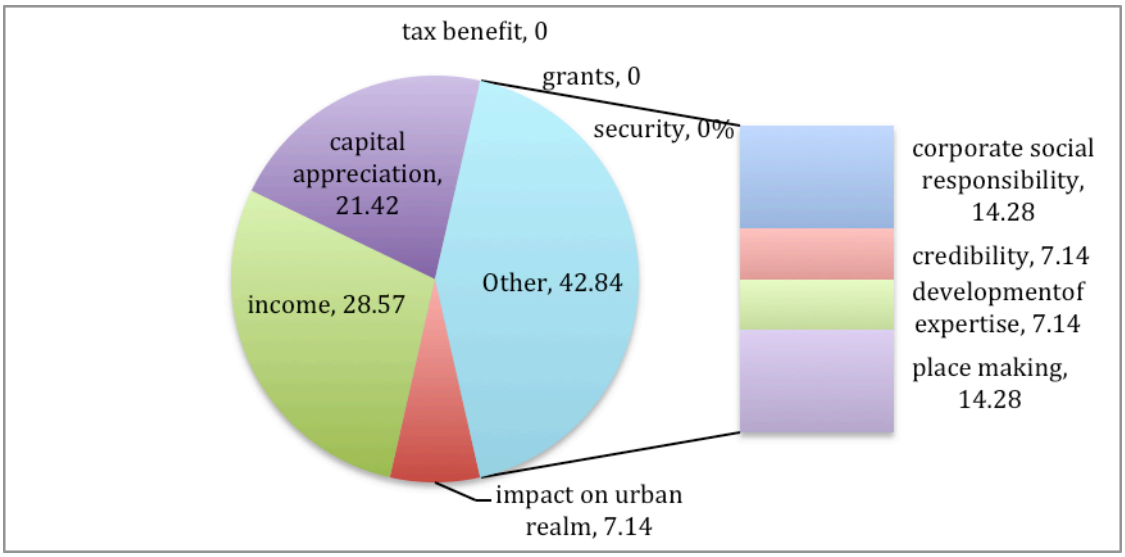


Figure 7.10: Investors' Priority (Source: Author, 2016)

Figure 7.10 shows the perception of KC respondents with respect to the investors' priority. The result indicates that generating income is the main priority for investing at KC. In addition, a further 21.42% and 7.14% correspondingly were the investors' priority for capital appreciation and impact on urban realm.

A model for King Cross incorporated all the data regarding how the project builds up layers of funding, and how it consolidates a cash flow for each building. One key point respondents stressed is to look at the sensitivity of the project.

> *Respondent 8: "Sensitivity analysis is quite key in assessing the likelihood of project fruition."*

There was an overall hurdle at the beginning of the project which was risk adjusted to the extent it covered the whole development risk. As new investors come in, they are going to have different sets of hurdles, because as they become involved, effectively 50-60% of the development programme is complete; it is and substantially de-risked and so there is no further requirement for equity.

> *Respondent 10: "The hurdle rate change in terms of progress."*

KC does not receive third party equity as it uses its own equity and debt. This implies that that no partnership hurdles exist, since in the KC funding agreement all equity comes from the investors.

> *Respondent 9:"The model at Kings Cross is to retain all of the buildings so we sold part of the plots to fund the infra-structure and everything else retained."*

Kings Cross investors very much depend on leases, and operate on the assumption that in five years' time there will be a retained estate of 2.5 million pounds per square foot, equivalent to 100,110 million pounds in total. There is, therefore, a great focus on lease and operating income (interview, 2014).

Kings Cross investors expect their return on investment based on capital growth and income. This in turn depends on securing a lease for commercial elements and the sale of residential units. Their long term objective is to retain Kings Cross which will consist of 8 m sq. ft. of mixed-use development including 4.4 m sq. ft. of offices, the University of Art, student accommodation, 500,000 sq. ft. of retail, new hotels and 2000 new homes, this will belong to London Estates by the time of completion (Interview, 2014).

Emerging Issues – (Innovative Funding)

Unlike most urban re-development projects, Kings Cross stands on its own as a project with no governmental grants injected. In terms of a business plan, it is very creative and dynamic; it is updated regularly based on upcoming circumstances such as market conditions. KC first funded the infra-structure through cash and then developed the project phase by phase using bank finance.

The research suggests that income and capital appreciation have been the main priorities for project investors, and the second priority has been the urban realm and the place-making objectives.

Project risk was identified to be delivery risk, market risk, cash flow risk and development risk; these all seem to have been to be mitigated, based on the interviewees' opinions.

7.3 Queen Olympic Park Development

Overview

As discussed in Section Three of Chapter Six, case studies were selected on the basis of the criteria of partnership, funding model and stage of development (Table 6.4). Queen Elizabeth Olympic Park has cost more than £12bn plus, creating "the biggest new park in Europe for 150 years", at the bottom of the Lea Valley. Stretching over 230 hectares (568 acres) around a knotted tangle of waterways and railway lines, it is an iconic governmental funded mixed-use regeneration project. About 50-60 years ago, East London was entirely an industrial area, full of factories. In the late 70s, after the docks were closed, the disadvantages of the area become exacerbated. Most land became vacant and the community was considered amongst the poorest in London. Accordingly, by the beginning of the 1980s, this situation had become a problem in two ways. Firstly because there was a need to address the disadvantaged area and secondly, to find an alternative development area for London's future growth. The area needed more public sector investment in order to make it an opportunity for the private investors to pool their money

> *"The experience of Canary Wharf was negative for local people as their views of regeneration were that it was something not for them. So we thought to bring this proposal for Stratford but we needed to make local people excited about the change and really to take the opportunity for change, e.g. I'm going to get skills, a better job a nice school environment etc." (*Respondent 8, Table 7.5)

When the idea of Olympic 2012 was floated, this was seen as a catalyst brought about by public sector investment into the area to buy and assemble the decontaminated land, and upgrade the station. By putting this part of London on the world stage, the project had encouraged businesses to recognize that this was a good location for investment. On the other hand, this whole change was also confronted with the problem of how to accommodate local people.

> "*This regeneration wasn't something that happened just for 2012. Instead it started 25 years of regeneration of London and this is why it*

*has been a key to a successful Olympic legacy. We had this idea of regeneration for 25 years but thought the idea of the Olympics would help to make it happen much quicker and provide a very good opportunity for local people". (*Respondent 3, Table 7.5)

Table 7.4: Queen Elizabeth in Numbers (source: Queenelizabetholympicpark.co.uk)

London Legacy Development Corporation (LLDC), which is a Mayoral cooperation, set out immediately after the Games with the task of transforming the site and to bring forward the development over a 25-year period. The Mayor of London, - Boris Johnson - established the LLDC in the first place.

LLDC is part of what is called, informally, the Greater London Authority organisation family. This includes organisations such as Transport for two boroughs of London, Hackney and Newham, and the local government and planning authorities are also an important part of that. The Mayors of each borough sit on the boards and the LLDC works with them on a day-to-day basis (Figure 7.11).

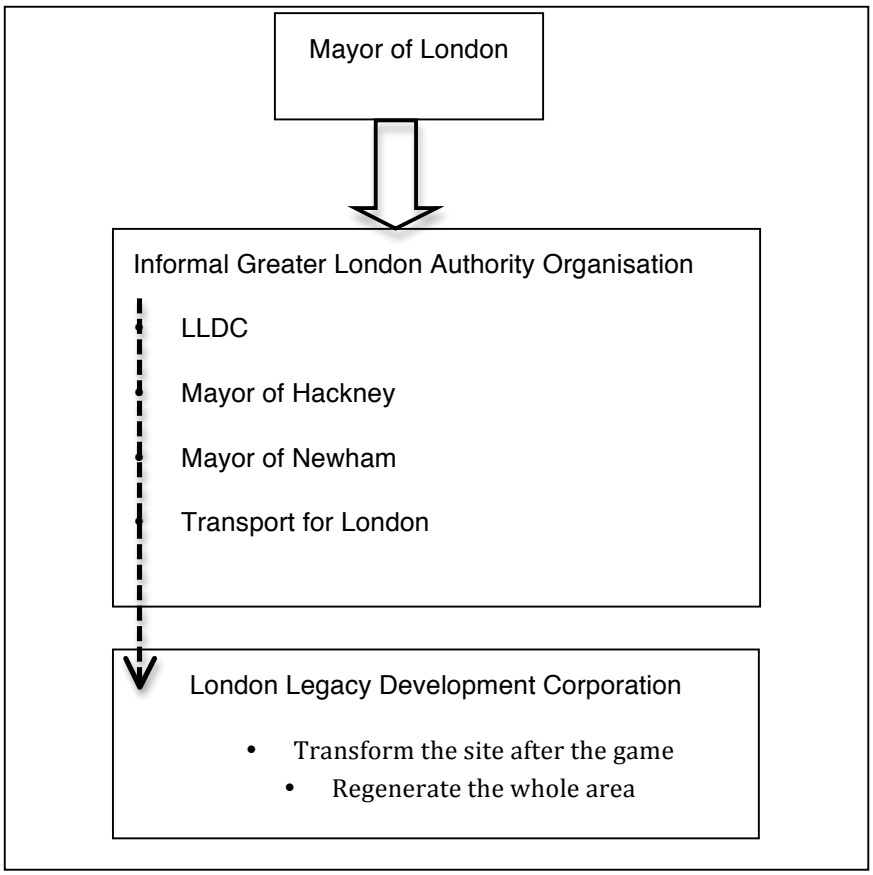


Figure 7.11: LLDC Partnership Structure (Source: author, 2016)

Interviewees

During March 2014, the researcher conducted eight interviews with key project stakeholders identified from the review of the project's webpage; the interviewees include senior planners, architects, lawyers, council members and developers.

	Interviewee	Job role	Company
1	Respondent 1	Social entrepreneur	Andrew Mawson Partnerships
2	Respondent 2	Responsible for agreeing statutory compensation with the former landowners at the Olympics site	
3	Respondent 3	Executive Director of Regeneration and Community Partnerships	LLDC
4	Respondent 4	Master planning team	Fluid
5	Respondent 5	Head of Planning	LLDC
6	Respondent 6	Deputy Chief Executive • Professor in Urban Design	LLDC UCL
7	Respondent 7	Planning director	Camden council
8	Respondent 8	Lecturer	Birkbeck college

Table 7.5: Interviewee List

The East London region greatly benefited from the influx of investment that resulted from the preparations for the 2012 Olympic Games, and the Queen Elizabeth Olympic Park which was created to both host the event and then to serve as its lasting legacy. The improvements to transport and infrastructure helped trigger a major regeneration of the local area. Homeowners benefited from increased house prices – average house prices in the neighbourhoods immediately bordering the park leapt from around £200,000 in July 2005 to almost £340,000 by March 2014 – a 62% increase that represents a monthly rise of more than £1200. This greatly improved interweaving of residential, retail and commercial spaces shows the lasting impact of the 2012 Olympics on that region of London.

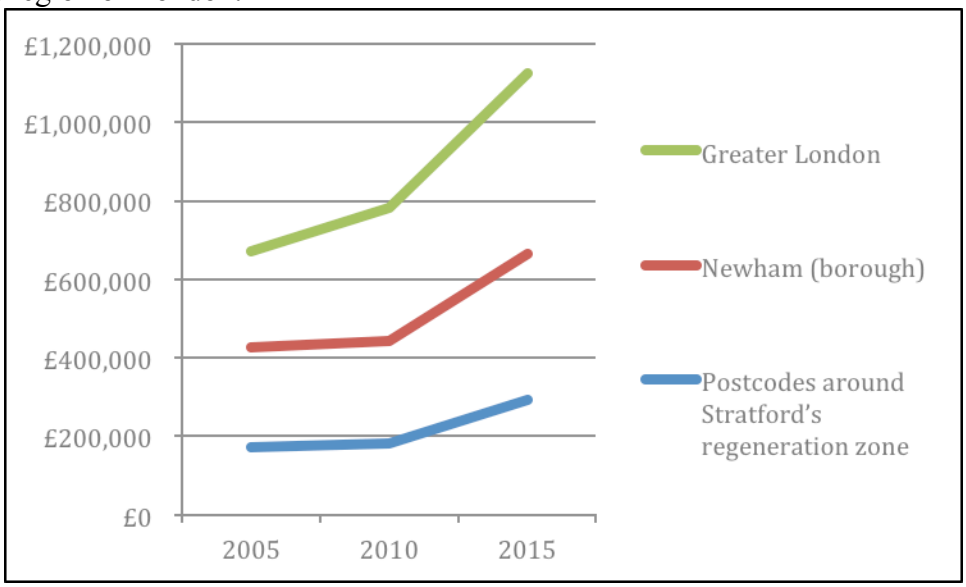


Figure 7.12: House Price Growth Compared (source author, 2017)

Figure 7.12 compares the price growth of the Stratford area with the prime central London region and also with Greater London during the period of regeneration from 2009 to 2015. Exclusive research from data analysts LonRes shows average values near the Olympic Park grew from £171,081 in 2005 to £293, a 71% rise. The wider Olympic borough of Newham is up 47% in the same period, to an average £370,000. This suggests that the Olympics have had more of an impact in the immediate area of the Park than in the wider borough – where, in fact, it may be argued that gentrification has played a greater role in improving property values.

A Business Survey by the Legacy Corporation Local Economy Study records how businesses in the area were asked to list the three main advantages of their current location, and the three things they would want to change. Public transport accessibility, and the nearness of similar businesses, were seen as key advantages (Figure 7.13), while traffic and the cost of parking were among the key factors they would like to change (Figure 7.14). Some businesses also disapproved of residential and other non-commercial developments taking place nearby (http://www.queenelizabetholympicpark.co.uk).

Figure 7.13: Location Advantages (Source: LLDC Local Economy Study)

Figure (7.14), Location Improvements (Source: LLDC Local Economy Study)

All of this suggests that the Olympic Park area has a bright long-term future, stimulating investment, creating employment and contributing to the general uplift of the surrounding districts. The introduction of Cross Rail should also help sustain house prices – it has been found that residential property within a ten minute walk of a Cross Rail station consistently out-performs property in districts around it. This looks set to continue – current forecasts suggest that price increases close to the new train link will be around one per cent higher than increases for the rest of the London area.

London's 2012 Olympics did, however, fail to meet one of its objectives - to be ecologically self-sustaining, despite having the good intention to "treat all waste as a potential resource and ensure that at least 70% of Games-time waste from closed venues is either reused, recycled or composted." By contrast, Brazil's President Luiz Inácio Lula da Silva went a step further in his country's successful bid for the 2016 Olympics, creating a forest of 11,000 trees, representing each athlete that competed in the Games. Also the Olympic torch cauldron is being moved from the Maracana stadium to the city where it will be kept alive by wind power. (www.nus.org.uk/en/news/london-2012-rio-2016/) Rio de Janeiro's Maracanã Stadium itself – 20 miles from the Olympic Park – was simply renovated rather than constructed from scratch, whilst London's purpose-built stadium was situated in the heart of QEOP. Brazil's attempt to use the Olympics to further an environmental message in this way may point a

path to the future for mega-projects supporting mega-events – such projects will need to take environmental concerns increasingly seriously, given global concerns about climate change and the future of the planet. (www.nus.org.uk/en/news/london-2012-rio-2016/)

7.3.1 Smart Institutions – (Foresight: Intelligence, Resilience, Creativity)

As explained above, this research has drafted a five-point framework to evaluate MURPs. All criteria will be discussed for each of the case studies separately. As discussed earlier, one of the proposed characteristics for successful development was 'Foresight'- a well-informed and forward-thinking planning system, underpinned by robust data collection.

Holding the 2012 Olympic Games offered an opportunity to kick-start the regeneration of the vacant area in Stratford that had historically been one of the most deprived areas in London; this presented serious economic and social challenges because of its multi-ethnic and industrial background. Therefore the proposal and concept for Queen Elizabeth Olympic Park was not just for the 2012 Olympics but also for the regeneration of the area after the games. There was a vision to create new homes, new business places within the area and also to encourage economic investment in this location to help improve the lives of local people in East London.

The London Plan and London Vision of 2000 set out the strategic goal of hosting a major international sporting event to strengthen London's status as a premier global city. This strategy was manifested as the London Olympic Game of 2012. Apart from hosting the Olympic Game via the QEOP, a major priority was the regeneration of the Lee Valley and Stratford in East London. The ambition called "Conversions" was aimed to transform the socio-economic life of the local community over a period of 20 years, to connect the area with the rest of London.

Key Objectives	Percentage
Conversion	8.33
Creating economic investment	16.66
Olympic games	25
Regenerate the area	25
London growth and lack of space for future business and residential development	16.66
Rediscovery of River Lea	8.33

Table 7.6: QEOP Key Objectives Based on Respondents' Views (Source: author, 2016)

As outlined in Table 7.6 the key objectives of the QEOP and the Olympic Games were identified by the respondents as regeneration and creating an economic investment zone.

In the creation of the Queen Elizabeth Olympic Park, the vision was to make a viable sustainable community and to bring forward the regeneration of the area. Also, the conversion plan put forward by the leader of Newham council sought to raise Newham to the level of an average London borough in terms of social mix and the standard of living. Newham Borough was previously one of the most deprived areas of London in terms of poverty, housing provision and employment opportunities. The "Conversion" as a result of the QEOP was intended to address such deprivation.

Project Vision	Respondents perception
Expand the Stratford line	25%
Conversion	50%
Regeneration	75%
Absorb public and private investment	25%
Creating a viable sustainable community	50%

Table 7.7: QEOP Project Vision Based on Interviewees' views (Source: author, 2016)

Table 7.7 shows that, based on interviewees' perceptions of the Queen Elizabeth Olympic Park, the vision was, first, to regenerate the area and, then, to convert it into a viable sustainable community. Some respondents, however,

mentioned the project's critical objectives regarding the expansion of infrastructure and the absorption of investment funds.

> *Respondent 5*: "*Olympic regeneration strategic goals were to receive government investment; Stratford station received £100,000,000 investment after the games, Cross Rail is currently being built to come out of the tunnels, and the UK's biggest heat network being built here.*"

To create a robust planning model, it is essential to implement novel models and techniques. For the Queen Elizabeth Olympic Park project, a wide range of models and techniques such as Transport modelling, Impact assessment, Strategic assessment, Sustainability appraisal and Environmental Impact Assessment were used.

7.3.2 Smart Institutions (Institutions: Governance, Scale, Fit)

As discussed earlier in our framework, Smart Institutions are the second driver for MURP success. Smart Institutions foster quality growth and curtail its short-term, predatory or executive models (Huston, et al, 2015). As discussed earlier in this chapter, Smart Institutions are well structured and governed, with tight control and oversight mechanism.

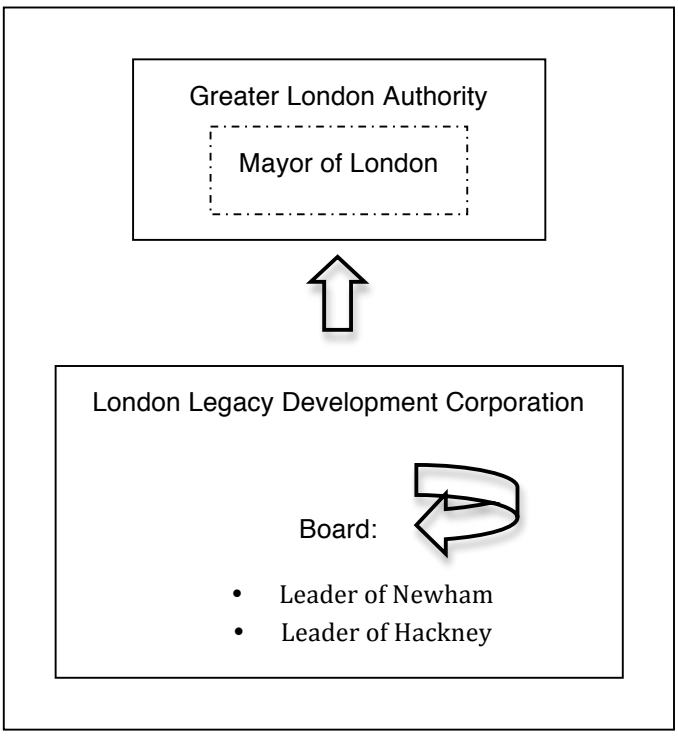


Figure 7.15: QEOP Project Board

London Legacy Development Corporation (LLDC) operates the Olympic Park, owning most of the venues and the land edge of the park and being in charge of the development of homes and businesses. LLDC is an independent corporation and a Mayoral body, which reports only to the Mayor and the Greater London Authority. The Mayor of London, in turn, is accountable to GLA. LLDC has no direct oversight from the national government; instead its board includes local authority leaders. The main accountability is to the Mayor of London and the local authorities.

> *"Respondent 5: "LLDC needs to produce report for the committee in the first place; we have to make a report annually which needs to be approved by our case board.*

Regarding accountability levels, Queen Elizabeth Olympic Park is at a London-wide level, reporting first to the Greater London Authority and then down to the London Assembly. Since LLDC is a Mayoral organization it has to be accountable to the London Assembly as well (Figure 7.16).

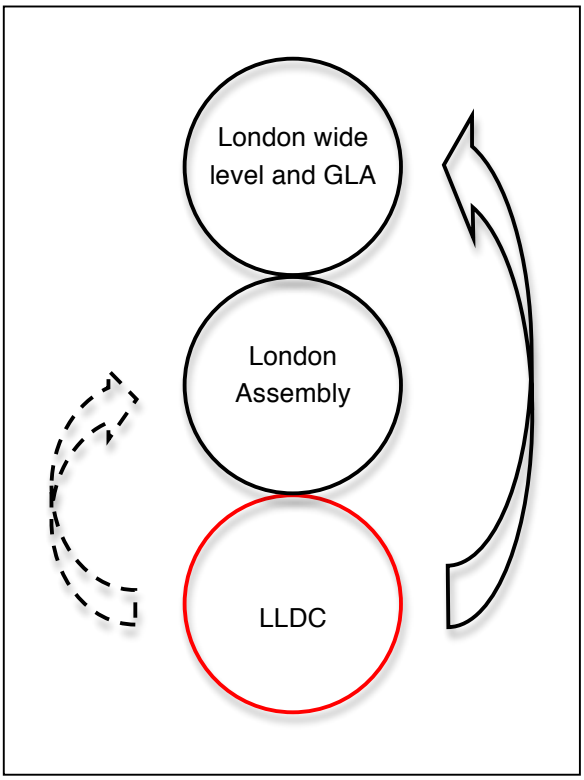


Fig 7.16: Oversight, Control and Feedback Mechanism (Source: author 2016)

The Olympic Delivery Authority was established to build the park and venues for the Olympic Games; a separate body managed the games themselves. The London Legacy Development Corporation, a private organization, was then set up to deal with what would happen after the games.

> *Respondent 5: "On reflection of government partners and also what we do, it has provided both QEOP and LLDC an organization with focus to change and a budget to invest and make changes and with the appropriate powers it needs to make change. Moreover, with the way it operated we embedded ourselves in the local community so we are not as distinct as we don't see it as a foreign organization."*

In 2011, the UK government introduced the Localism Act, intending to devolve the responsibility for regeneration in major areas like East London to regional government. Thus LLDC changed from a private company reporting to regional and national governments into a corporation that reported exclusively to the Mayor and the London Assembly.

Interviewee respondents offered different views regarding the QEOP institutional framework. Some believed the model has been very successful since it has enabled the regeneration and achieved significant changes. Other respondents point out the QEOP institutional frameworks weakness as explained below:

> *Respondent 5:"It has its faults, which was to think that a development corporation is a vehicle for this kind of development. A public accountable body is not fast enough in decision making for a development of this scale."*

> *Respondent 6: "I think the ambitions are far too low for what you can achieve in London. London has done better than any other Olympics, but the arrangement for the transformation of the Olympics is disappointing, in my opinion."*

> *Respondent 7:"If it was not first of all the development falling for long phases I don't think the area is going to be as distinctive as the vision*

was after the Olympics and I think there are lots of implementation problems as the QEOP has been too conscious and too safe."

Regarding stakeholder co-ordination, there are formal arrangements between LLDC and boroughs of Hackney and Newham for where they are working on different projects. Also there are memoranda to provide an overview of the different works or projects where LLDC works with the local boroughs. LLDC also makes a distinction between certain functions as they co-ordinate decision-making in this area, and discuss with the government decisions that may have an impact outside their local area. Various opinions on the partnership arrangement at the QEOP development were discussed by the respondents (Figure 7.17).

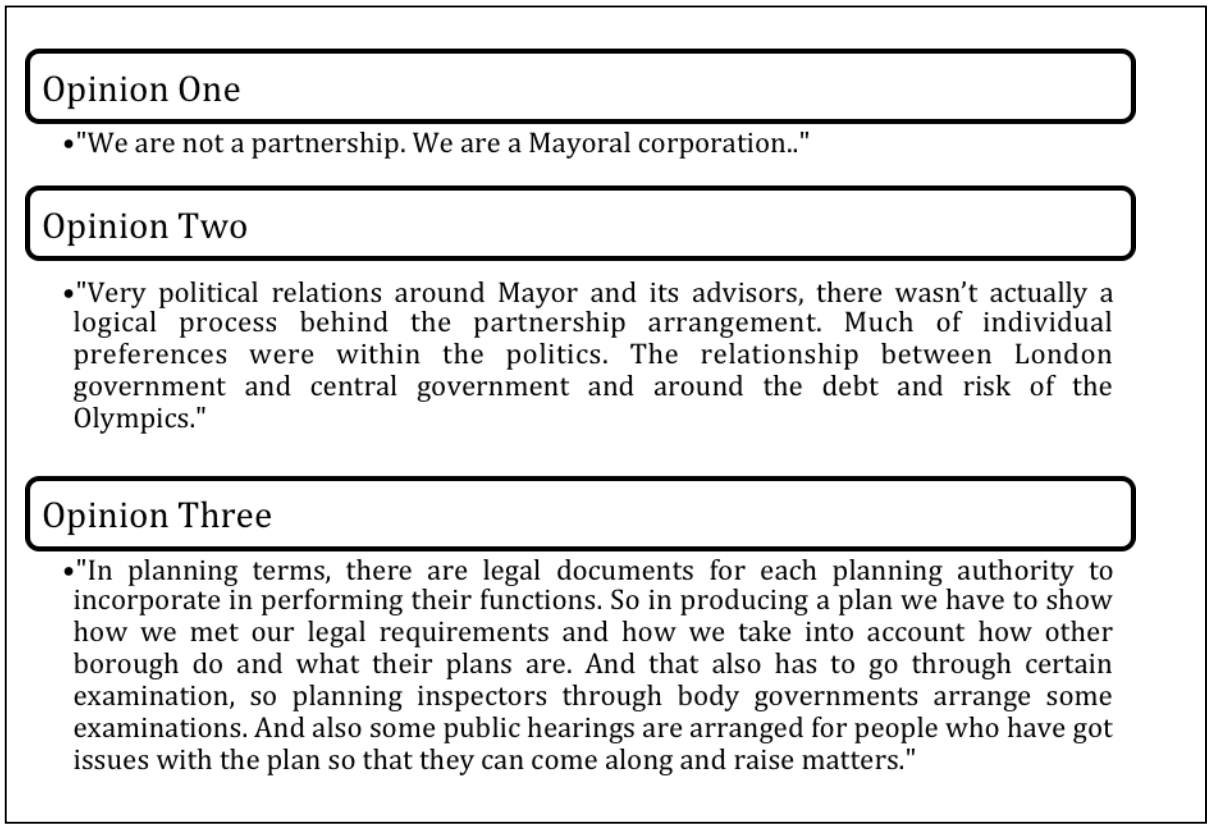


Figure 7.17: QEOP Partnership Arrangement (Source: author, 2016)

Emerging Issues _ (Smart Institution)

Queen Elizabeth Olympic Park regeneration project was unique owing to its association with the 2012 Olympic Games, which both kick-started the project and also ensured the involvement of the GLA and the UK government. The vision for the area was to win the right to host the Olympic Games in the first

place, and then to be a driver for the regeneration and attract governmental funds and attention. The ambition for QEOP, which was located in one of the most deprived areas of London, was to raise the local area to an average London level by improving the range of housing, employment opportunities and retaining some parts of Olympics. Some respondents believed that this conversion rate is very low and that the project, within these parameters, could have achieved a lot more. There is a strong possibility that without the governmental help for the formation of QEOP in the first place, and then their direct investment to develop the area, the regeneration would not have happened. Having noted the benefit of government support to fund and de-risk the project, many stakeholders, nevertheless, hold the view that having a public accountable body means that the organization is not fast enough in making decisions for a development of this scale. In terms of the partnership agreement, since it is a Mayoral corporation, much of the stated individual preferences were politically charged.

7.3.3 Quality Project – (Locales: Community, Baseline, Genius Loci)

The literature review (Chapter 3) underpinned the draft framework as a basis to evaluate MURPs. The third criterion identified for evaluation is quality project. Planning permission for each development is sought by the developer to demonstrate to the local authority that they have taken all relevant issues into consideration, including the hopes and aspirations of the local community. Communication with the local community at Queen Elizabeth Olympic Park has always been strong; there have been numerous face-to-face meeting with the community as well as formal meetings around the Park. A park panel was organized, which draws from local individuals and community organizations around the Park, helping the LLDC address particular problems that might occur. Additionally, a youth panel has been formed, which is intended to involve young people with shaping the future of the Park. As part of the planning application, the planning authority consults with the community to produce the plan.

> *Respondent 7:"To enable local people to be involved actively in the development of the park has always been the biggest aim."*

Reviewing QEOP in 2014, National Geographical Magazine said the regeneration programme brought both pain and gain, noting that some of the previous businesses of the area went bankrupt after they were persuaded to leave the area and purchase land somewhere else. Some respondents suggested that the national and even international importance of the Olympics meant that such local concerns tended to be overlooked:

> *Respondent 2:"In terms of public consultations, that's a formal statutory thing but because it was a public project of high national importance these objections didn't stand a chance."*

Regarding local employment creation, when the legacy corporation links with development partners, it is required to create a number of apprenticeships to help train local people and provide them with improved skills.

East London has a rich cultural identity and there are focal points of cultural activity in both Stratford and Hackney; this encourages visitors to come to the Park. Furthermore, the park has also attracted the presence of some large cultural institutions, such as the London Victoria Albert Museum.

> *Respondent 5: "The reason they are coming here is because they are recognizing east London has creativity and energy."*

The QEOP area has a very diverse mixture of cultural identities, and LLDC has sought to recognize this in the demography of both those who work in the Park and those who wish to visit it and use it regularly.

> *Respondent 1: "All the people come here from miles away, not just the local people, to do their shopping. It has become a social meeting place as well as a shopping centre. It has a big impact. The transformation has been successful."*

7.3.4 Quality Projects – (Project: Design, Efficiency, Spatial Justice)

As discussed earlier, the fourth criteria in the evaluation of MURPs is ensuring the project's quality and meeting its sustainability benchmarks.

Respondent 3: "The London aquatic centre, built to accommodate the London 2012 Olympic Games was designed by the famous architect Zaha Hadid and cost 2.5 million pounds. The centre was designed to provide the optimum size and capacity for use in a legacy mode after the games; as part of sustainability for the legacy they removed the top deck and decreased the sitting areas."

QEOP has been one of the UK's most sustainable MURPs. As a part of its sustainability plan, the main Olympic Stadium was sold off for continued use. Local Premiership club West Ham United, who purchased the Olympic Stadium, agreed to preserve the athletic track as well as continuing the use of the venue as a football stadium. Special retractable seating was designed and installed to achieve this. A number of sport venues are open to public such as the Aquatic Centre, Velopark and Copper Box sports venues as well as the Arcelormittal Orbit which is the tallest sculpture in the UK at 114m high, designed by the world famous architect/sculptor Anish Kapoor (further evidence of the project's emphasis on designing excellence). A hockey and tennis centre is also doing business at the Park.

In terms of the urban realm, the respondents report that new communities are being built at the Olympic Park with the facilities of improved housing, leisure and shopping spaces. The River Lee has been transformed into a three-dimensional mosaic of wetland, swales, wet woodland, dry woodland and meadow (queenelizabetholympicpark.co.uk, 2016).

Respondent 3: *"It's got sort of a vibe. I think that's probably to do with the fact that the University of Arts has got 3,000 students residing there which brings a sort of vitality and energy to the place."*

The area is not too dense and the building heights were carefully restricted. Although less economical than taller blocks of flats, those at QEOP are all between eight and twelve storeys in height.

Respondent 5:"I think it has that sort of vitality. It did bring people in. It wanted to remove the barriers. If you walk along the tube path to the north of that enclave and you want to move in there, there's nothing actually physically stopping you but there's almost a force. It's quiet."

Emerging Issues – (Quality Project)

Taken together, the information gathered from the interviewees suggests that QEOP has considered community consultation as part of the planning process throughout. Having the conversion ambition ensured that the scheme paid high attention to the socio–economic improvement of the local community so that it reached the same standards as the rest of London. Everything the project does is intended to create opportunities for local people.

In terms of the sustainability of the project, QEOP has been one of the most sustainable large event projects as most parts of the development now have alternative uses, such as a reporters' hub which has been transformed into a business centre

The findings from this research suggest that this project, partly because of its high national and international importance and the extent of government support, has achieved success. Inevitably there have been some losers. One of the advantages of this site – especially for print businesses – was its closeness to the city; some of the print factories who had no option but to move have since become bankrupt because of various concerns about delivery timings.

7.3.5 Innovative Funding

As discussed earlier in this chapter, the success or failure of each urban regeneration project highly depends on its financial viability.

The major funding for changing the Olympic Park was public money and this formed part of the Olympic investment capital. LLDC still receives a subsidy from the Mayor of London to continue the development. Therefore the core funding is public, through the Mayor of London's office. Regarding the development of homes and business plots, what LLDC have done is either to go in partnership with private developers to build homes and share profits or to grant loan leases to the private sector who pay the rent and who will then develop the building for business purpose with their own money. Therefore the core funding is public, but with additional funding coming in partnership with the private sector to generate income. Some of this money goes to manage the Park and to reduce the public expenditure and LLDC have to pay back some of these money to the government for the National Lottery.

Respondent 6:"The actual development fund is now private. There are particular complications; one is the vision that West Ham United would take the Olympic stadium because of the financial gap. The government has also given grants to persuade the Victoria Albert Museum to take part in the park."

Also National Lottery money has contributed to the project. Thus the principle is that over time the money generated from these schemes will be used to make those repayments as well as to pay for the other social infrastructure such as schools and medical facilities.

Respondent 5:"The developing partners bare the cost of development and will share the profits. Sharing the profit element will help to repay the money of national lottery and the government's money; they share the risk with Legacy Development Corporation and so will share the profit as well. "

Regarding the project milestones, QEOP has set KPIs where LLDC needs to report to its board, which is chaired by the Mayor of London.

There are different project risks for each part of the project, but mainly the risk is to complete works on time and deal with tight programme management. There is a dedicated project manager to make sure the project is delivered on time. Another risk is to keep to budget, ensuring that the money does not run out. Depending on the stage of the project, risk changes, and at a later stage it becomes more about managing partnership with the right developing partner. An example of this would be by monitoring and reporting to make sure the partnership works well. Moreover, project control around each organization is a risk.

The investors' interest varies between different investors – for example, the Mayor of London as the main investor in the project, has to show London voters that the project is a success and that the money spent is worth it.

Respondent 7:"For the QEOP the main investor has been the government. The Mayor of London and the government's interest is success for the legacy and for the games. They wanted to show that the

money, which was spent here, has made a change to the world because of the development, and also because of the London economy, for the number of houses here that London needs."

LLDC's interest is in attracting business; this feeds the jobs that London needs, also enhances life and the social economic level of local people in east London; this is lower than the rest of London.

"Long term vision is about what we want to achieve and then holding fast to that reality and how that fits into the broader picture."

Investors' priorities also vary. For private developers like Westfield, PBD or house builders, their interest is in capital appreciation, and to ensure the project is done in a way to benefit the area. The priority for the planning authority is to make sure that everything is done correctly - according to regulations.

The incentives for private developers are that they acquire planning permission to do the development, as well as government investment in the area by building health centres or schools, for example. Therefore, essentially, private investors get what they need for themselves as well as providing for the community with improved infrastructure.

Emerging Issues - (Innovative Funding)

The QEOP regeneration is mainly funded by the UK government, but with additional private money injected for the development where the developing partners bear the cost of development and will accordingly share the profit.

Unlike most regeneration of this kind, the budget is not considered as a major risk for the project because this project has a high national importance and received a massive amount of governmental funding. It was indeed very important for the government to finish the project perfectly on time. Another government priority, as the main QEOP is the success of project as a legacy, is to show voters and taxpayers that the money has been spent wisely.

7.4 Nine Elms Development

This section will apply the MURP evaluation framework to the Nine Elms Regeneration Project. The Nine Elms Regeneration Project includes central London's last remaining industrial district and is the final piece of the South Bank to undergo a wholesale transformation. The area has vast brown field sites and these are in the process of transformation to becoming a brand new residential, retail and office business quarter, right in the heart of London (Wandsworth.gov.uk, 2016). According to the city's Mayor at the time, Boris Johnson, Nine Elms was intended to be "possibly the most important regeneration story in London and in the UK over the next 20 years". There are three factors that make Nine Elms Regeneration worthy of research. Firstly, the flow of Foreign Direct Investment (FDI); secondly, the extent of government funding and application of Tax Increment Finance (TIF); and thirdly, the extension of the Northern line tube and the addition of a new underground station.

Up to 3km of the Thames riverside has been opened up to the public, creating a brand-new stretch of London's South Bank. Vauxhall is being dramatically re modelled to create an attractive and pedestrian-friendly environment with new and improved public spaces and better links to the river. A dynamic cluster of tall buildings will also take shape, thereby creating a new addition to the central London skyline.

Before the regeneration, the area comprised a large amount of under-used land. The two local Boroughs of Wandsworth and Lambeth, together with GLA, considered different proposals and strategies for development of the area. The priority was to transform the area through a mixed-used and high-density development to create employment, housing and business opportunities. However, the economic recession of the 1990s and the GFC in 2007/8 delayed its implementation (Table 7.8). Eventually the proposed development by the Malaysian backed consortium offered a viable proposition with secure finances and a willing developer with a proven track record of similar schemes elsewhere.

Table 7.8: Nine Elms in Numbers (Source: Nine Elms webpage)

Like many London boroughs, Lambeth and Wandsworth contain areas of affluence and areas of poverty - often side by side. There is a persistent pool of economically inactive people with little mobility and this group tends to experience high levels of social exclusion and poor education, employment and health outcomes (Lambeth.gov.uk).

The 2010 Index of Multiple Deprivation (IMD) place Lambeth as the 5th most deprived borough in London and the 14th most deprived in England, a relative worsening of its position since 2008 when Lambeth was ranked the 19th most deprived.

Nine Elms partnerships is governed via a board, the Nine Elms Strategy Board, which is co-chaired by leader of each council (Lambeth and Wandsworth) together with the deputy mayor of London, representatives from TFL, GLA and the landowners. One of the unique characteristics of the area is that all of the development sites in the area have different private owners and there is no publicly owned land.

Figure 7.18: Nine Elms Partnership Structure

Everything at the Nine Elms development was done through working in partnership with the private sector, where each individual partner goes through development planning permission and securing development finance. As shown in diagram 7.18 the structure of the Nine Elms Partnership consists of landowners, investors, strategic government groups and developers.

The strategy board and the partnership chaired by local authorities recognised the need for a body to help co-ordinate the entire scheme and they formed the Nine Elms delivery team, which is where Nine Elms strategy assembles. The Nine Elms group is employed though one of the borough councils, Wandsworth, but the funding comes through development contributions. The funding is partly from the planning approval granted to each site and partly from a percentage of finance given to local authorities as part of planning permissions to mitigate its impact.

Respondent 1:"The other thing was to set up a government structure for that project so that we could make sure there is a buy-in from principal level and the senior officer level in local authorities and the Mayor's office. So we constituted a board structure which consisted of the Deputy Mayor from GLA, and leaders of local councils meeting quarterly. Meeting with project officers and senior offices they get together to agree issues and problems with the politicians."

The Nine Elm partnership structure is quite straightforward; the idea is to keep the government steering the upper team, so that the politicians from local strategic levels and the senior officers would try to avoid the professionals coming up with plans with no political lines. Thus the political line-up was intended to make the project viable.

Interviewees

There were eight face-to-face interviews conducted with representatives of key stakeholders in Nine Elms (Table 7.9). The selection was mainly through finding the key stakeholders of the project from the project webpage. The interviewees included senior planners, council members and developers.

Table 7.9: Nine Elms Interviewee List

Average property price in Nine Elms is £1,065,353, which is 77% above the London Average of £601,775, as shown in figure 7.19.

Figure 7.19: Average Property Price in Nine Elms (Source: Foxtons Estate Agents)

Some materials have been removed from this thesis due to Third Party Copyright. The unabridged version of the thesis can be viewed at the Lanchester Library, Coventry University.

7.20: Nine Elms Prices Compared to Nearby Locations (Source: Foxtons Estate Agents)

Figure 7.20 shows how Nine Elms prices have increased during the construction period. According to JLL, average value growth for residential property across Nine Elms was nearly 35% between 2011 and the end of 2015. However, this is expected to drop to a growth of just six per cent by 2020. Andrew Frost, head of residential at JLL, said: “With the recent announcement regarding the arrival of Apple, the Northern Line extension and the completion of Battersea Power Station, Nine Elms will transform this part of the capital."

The current mayor of London, Sadiq Khan, welcomed the recent decision of Apple to move its UK staff to the Battersea Power Station Development in 2021; this is hailed as a further sign that London is open to the cutting edge brands in the world and the leading city for trade and investment. The Battersea property market – on the south bank of the Thames, facing the wealthy borough of Kensington and Chelsea, has benefited greatly from the development, as prime market property buyers have started to look beyond central London in recent years. As the transport infra-structure improves, this uplift in property prices is likely to spread to the immediate vicinity of Nine Elms itself. Two new tube stations will open as part of the large-scale regeneration of the Nine Elms area; a project that will also create 25,000 new jobs and 18,000 new homes (Knightfrank.co.uk, 2017).

However, this comes at a cost, particularly to the availability of affordable housing. There are now fewer than 400 affordable flats in the Battersea project – the original plan was to build 636 affordable homes targeted at local residents; they were promised a 40% discount on the average market rent. This would have been 15% of the total number of 4,239 homes planned. At the top end, prices range from £800,000 for a studio to £4m for a four bedroom flat (with a further three penthouses yet to be priced). This 40% reduction in affordable housing represents a blow to the project's original socio-economic strategy. In addition, the Nine Elms project has faced other technical difficulties, including restrictions on the restoration of the power station (a Grade II listed building), increasing costs, the impact of Brexit, and a collapse in demand for luxury accommodation. All of this has forced several changes to the original plan.

7.4.1 Smart Institutions – (Foresight: Intelligence, Resilience and Creativity)

Originally the regeneration area at Nine Elms was subject to multiple plans intended to create opportunity for two boroughs of London. Nine Elms originally was targeted to deliver 16,000 new homes, 25,000 new jobs and the desire to make better use of the land by creating high-density and high quality residential developments, which was the project's main vision.

> *Respondent 7: "One of the early discussions between the council and the GLA was about the land and how to best utilise that. It was political visioning with officers looking for potentials and how successful it could be."*

> *Respondent 3: "Making profit on the development so from our perspective everything was to ultimately generate return and profit and, at the same time, try and achieve a high quality development. The fact about Northern Line Extension was a key factor for us coming forward."*

The Nine Elms Project's key objectives were to optimise the potential land delivery, new housing and local jobs as part of the London Plan which placed emphasis on growth in London, its increasing population and growing economy (Figure 7.21).

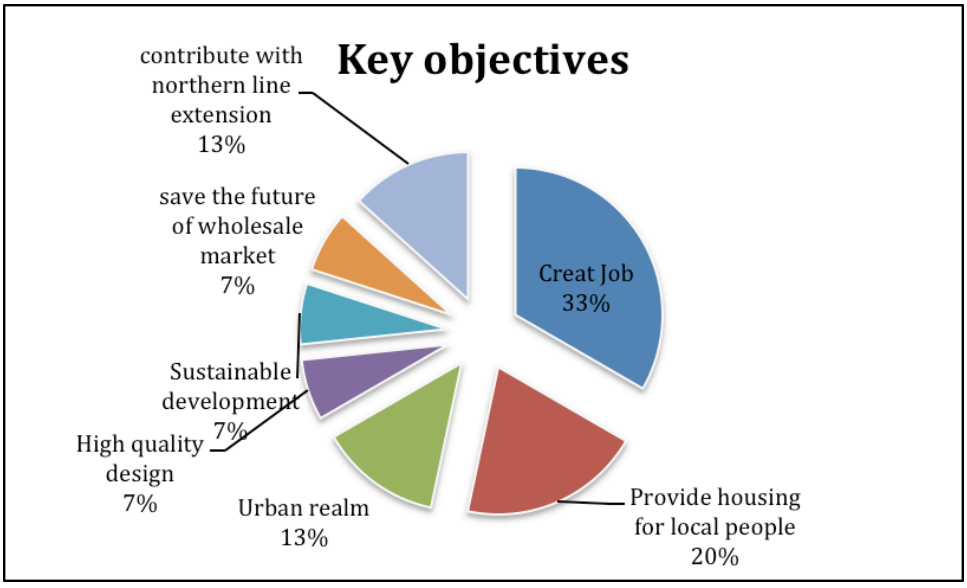


Figure 7.21: Nine Elms Key Objectives (author, 2016)

The Nine Elms site was quite large and originally was very low density; because of its closeness to the central London the project really took advantage of its location to maximise job creation and establish affordable housing via connections to the Transport network. Based on the respondents' views, the main objective of the project was to create jobs and, then, to provide housing for local people. Other objectives such as the urban realm were added later on.

As discussed earlier, to have robust planning it is important to use cutting edge modelling techniques. For the Nine Elms Transport, modelling was done by TFL and each individual application was subject to an environmental impact assessment. Transport modelling, Environmental Assessment and Vision impact assessment from the area and many other viewpoints were some of the modelling techniques used in Nine Elms.

7.4.2 Smart Institutions (Institutions: Governance, Scale, Fit)

As discussed earlier in our framework, Smart Institutions are the second driver for MURP success. The Nine Elms strategy board was made up of leaders of councils as joint chairs. The balance of the board was made up of landowners. There was no central government representation for Nine Elms and the project had to stand on its own feet and take a partnership approach.

The board influences evolving policy and seeks to foster collaboration such that common infrastructure is seen as a matter of common interest for all the developers, who are dealt with within an effective and progressive way. Board members meet formally on a quarterly basis in GLA. Figure (7.22).

> *Respondent 3:"They have come up with a board with representatives from public and private sectors and getting a sense of collaboration. A lot of trust has been secured in that way. Both the developers have to recognize how far they can push and the authority receiving planning applications have to realise the reality and to impress their ideas."*

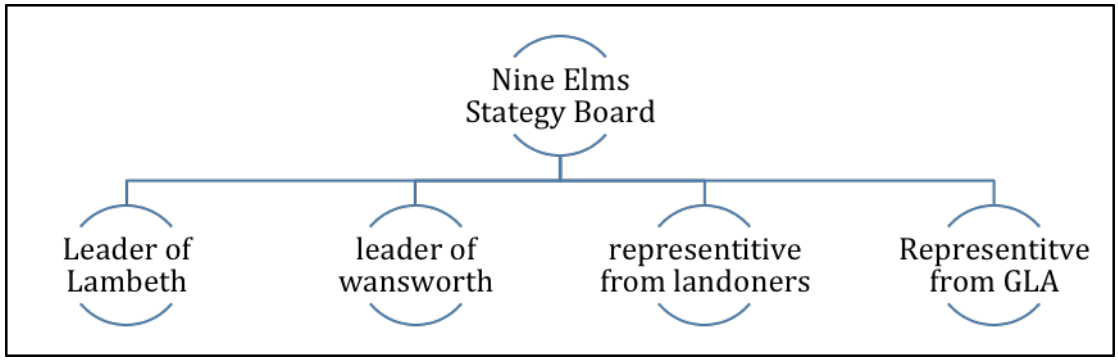


Fig 7.22: Nine Elms Strategy Board (Source: author, 2016)

Every partner and landowner has a seat in the project partnership-working group. Whenever there is an overlap between what different stakeholders do, then they send their representative to the Nine Elms partnership working group to discuss the matter. Nine Elms publishes a business plan every year that sets out the overall aim and objectives and highlights the project's milestones that need to be meet via an Action Plan. The Strategy Board meets every quarter and reports progress on each sub-project. If a project is on track according to the Action Plan it will be high-lighted green whereas red action indicates to the board what measures need to be taken in order to put the development on track (green). (Figure 7.23)

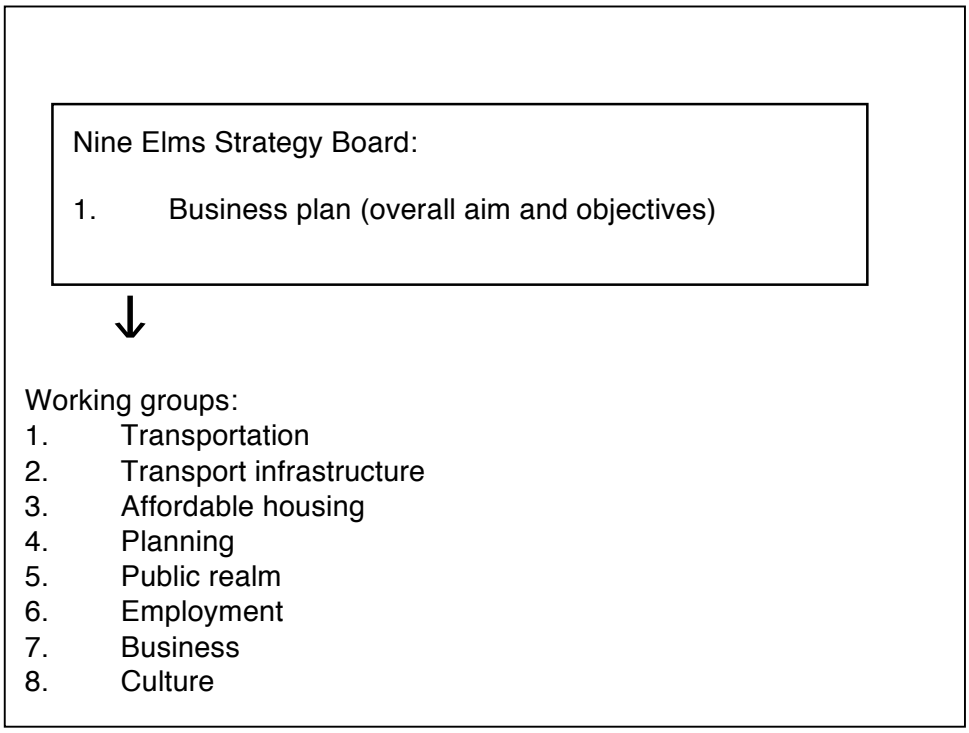


Figure 7.23: Nine Elms Strategy Board (Source: author, 2016)

Respondent 2: "Nine Elms is made up of multiple ownership so the governance is via a strategy board and the strategy board sets the direction and the objectives for the partnerships on an annual basis according to the business plan and then we judge our performance against that. And below the strategy board there are a series of working groups that deal with different issues like transportation, transport infra-structure, affordable housing, planning, the public realm, or that look at different issues and come up with guidance which forms the framework for developers to follow."

The project control mechanisms at Nine Elms are largely monitored through the business plan by the Nine Elms partnerships team. They ensure compliance with the guidance that has been provided and highlight if issues have not been addressed. Ultimately accountability sits with the Mayor and council leaders.

The institutional framework at Nine Elms is an unusual arrangement because it involves a public-private partnership (PPP) where the public sector has no land interest. All the land interest sits with the private partners but there is a great deal of co-operation and facilitation to moving things forward.

Respondent 4: "We ought to have a working relationship with the local authority and government and the other statuary authorities. You have to work with what's out there. Some work better than others, it depends on the individuals. I wouldn't say it's a perfect system."

Respondent 4:"The downside is that some of the infra-structure and structural issues will not be addressed as quickly by the public sector which means they need to catch up with the speed of private developers. It has been high-lighted that the public sector does not move fast enough to keep pace with the private sector. However, it has worked well in terms of demonstrating that you can co-operate without ownership."

Respondent 3: "The relationship is very important and fosters a good relationship with the council members and a good understanding of what's going on and what you are going to expect to be delivered by GLA and council."

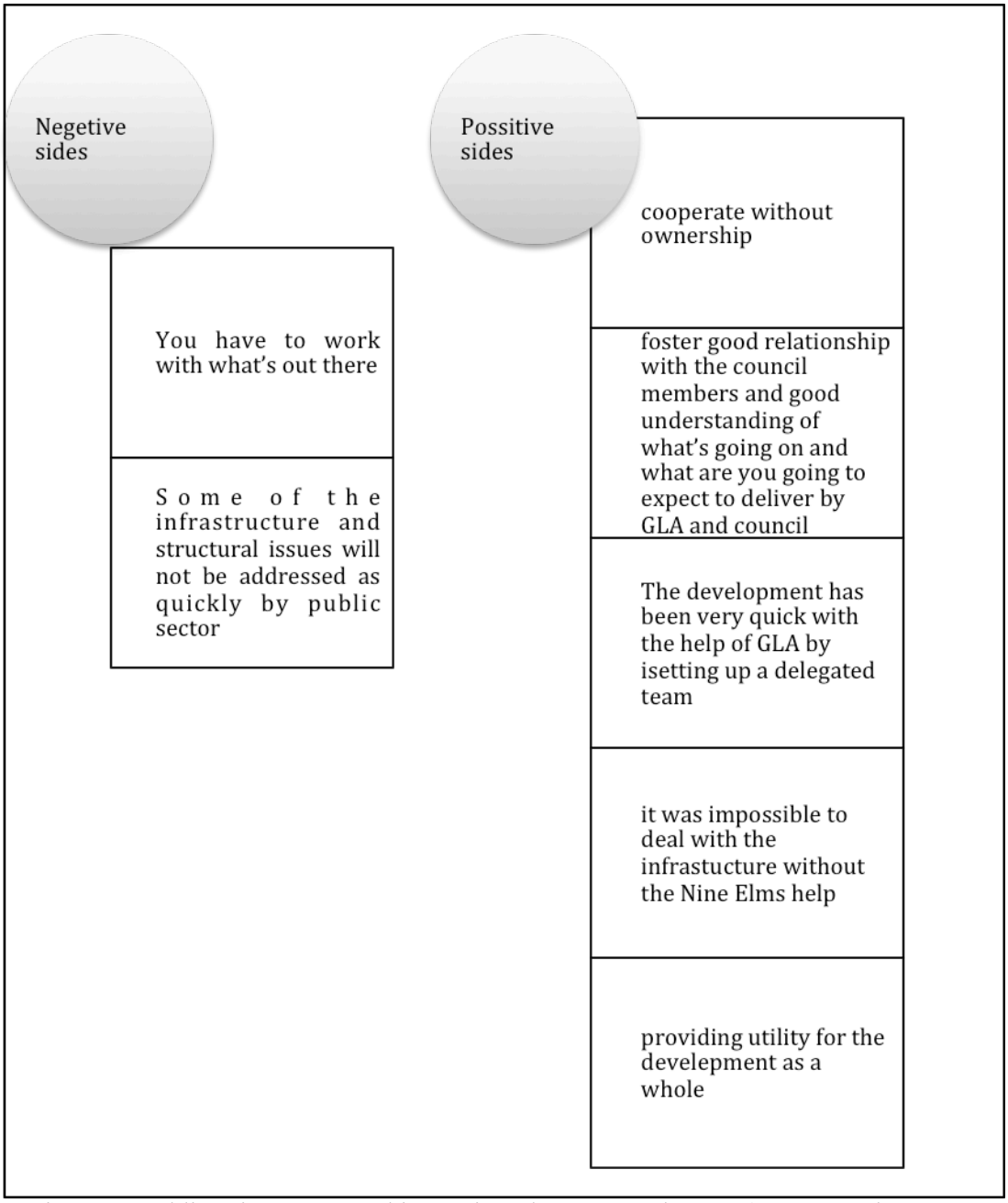


Fig 7.24: Public Private Partnership at Nine Elms Pros and Cons, (Source: author 2016)

Figure 7.24 outlines the pros and cons of the Nine Elm Regeneration Partnership institutional arrangement according to respondents. A number of respondents believe that Nine Elm Partnership has been quite effective by providing the Master Plan setting out broad parameters for developers to follow. Furthermore, they assert that without the Nine Elm Partnership support it would not have been possible to deal with the infra-structure requirements of the project. Other respondents point to the issue of electricity power supply. They note that the utility supplier will not deal with individual landowners in

the Nine Elm project but will deal only with enquiries of a strategic nature in order to create and deliver the capacity for a large-scale development.

The Nine Elms strategy forms a Special Purpose Vehicle in order to engage with making enquiries on behalf of landowners.

> *Respondent 1:"If we don't have a clear government structure we can't make progress on development. One of the key things is that the local authorities and strategic levels need to be broadly aligned."*

The GLA were instrumental in designating the area as an opportunity zone by formally identifying its partner's central activity zone and allowing mixed-use development. Much of the area, particularly around Nine Elms itself, was formed of industrial land and warehousing with low-density commercial use. The central government played an important role for Nine Elms in terms of guaranteeing a loan for the Northern Line extension and for which Nine Elms is part of the funding package.

Regarding stakeholder co-ordination, the Nine Elms team handles the stakeholders, mainly at a regional rather than local level. The regional engagement has been through GLA and the Transport for London (TFL), which is through their corresponding representatives on the Nine Elms board.

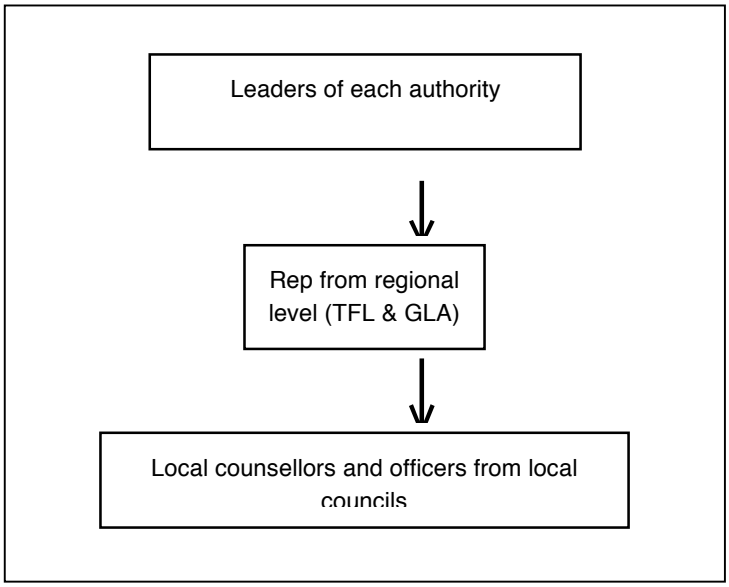


Fig 7.25: Nine Elms Strategy Board (Source: author, 2016)

The Nine Elms Strategy Board, as illustrated in Figure 7.22, is co-chaired by the leaders of each authority and representatives from the regional-level entities, namely Transport for London and the GLA. Local councillors, as well as officers, also attend the strategy board along with the local developers themselves.

In terms of partnership agreement, the development of Nine Elms has been achieved by consensus and an effective partnership with council leaders, partnership team and developers. Respondents reported that there were many discussions with landowners about how to work together and reach consensus.

> *Respondent 5:"The partnership is quite unusual because it does not have legal status, so it is not like a main developer co-operation of that nature. It's a unique Public Private Partnership. It came about as a result of land owners having to work together to plan the common infra-structure within the planning application, so, for example, positioning and designing the linear park around the opportunity area, which needs a co-ordination approach among the landowners. That was one of the key issues which was resolved between the land owners – so that the size, the route in the orientation and content of the park were the only things to be dealt when all the landowners get together."*

Nine Elms development used the developers' infra-structure funding that came out of the TIFs and this secured planning agreement. Some of the money was used to fund the offices for the Nine Elms partnerships in order for them to be able to co-ordinate various working groups and provide and monitor the business plans. The KPIs against the business plan would flag in green or red according to the project progress.

Emerging Issues – (Smart Institution)

Nine Elms regeneration project was one of the first projects where the government had no land interest. There is a political lining at a strategic level, which has helped the implementation of the development and also helped to secure funding for the project.

According to respondents, the structure of the public-private partnership and the Nine Elms Strategy Board and its membership composition has allowed a good sense of collaboration between public and private stakeholders and the creation of mutual trust between different parties.

Since different private bodies and developers who are in charge of the regeneration of their corresponding part own the land, they ultimately look to generate a maximum profit return whilst achieving high quality development.

Respondents' only negative comments highlighted the slow pace of decision-making by public bodies; at the same time they acknowledged that without the support of local government, projects of such a scale would not be possible to implement.

7.4.3 Quality Project (Locales: Community, Baseline, Genius Loci)

The fourth criteria of the draft framework to evaluate MURPs concerns project quality. Putnam (1995) notes that voluntary and community association are often the source of capital.

There were not many residents in the Nine Elms area before the development took place as this land was industrial. Community consultation took place at a strategic level when the area was designated as an opportunity zone and the plan had to go through the statutory consultation process. Community Consultation at borough level was implemented via the local plan. Also, each developer at the planning permission stage had to arrange their own consultations. On the back of that, Nine Elms as a delivery team, organized open days and shows every year; this was to promote what was happening in the area and to explain what the forthcoming plans were and to promote the benefits to the area.

> *Respondent 3: "We would have done a great deal of community consultations as part of our planning applications. It's a responsibility being taken from the strategy board that needs to be taken care of on a day-to-day basis."*

Each developer tends to carry out community consultation in two stages: first, prior to making planning application and then again, once the planning application has been submitted. The first is an initial public consultation while the second is where the developer goes back to inform people of what changes have been made and where.

> *Respondent 1: "The consultation takes place at local venues, somewhere highly accessible. We send invitations by post and we also make sure we send by email to each of the local interest groups to try to make sure to attract local stake holders into the public* consultation *process. The proposal pops into the website so people can view it there and give their feedback. They were held during weekdays, in the evening and at weekends to make sure there were times where people were able to come along to give their views. We then consolidated this*

into a community involvement and submitted it as part of the planning application."

Respondent 7: "We produced a 3D digital model of the area at local level and for the London-wide area, we set out the scale of development, number of jobs etc. Then we went to the local Borough to show the presentations to the local groups. There were lots of things they liked about it. People like the park and more affordable homes. We didn't try to hide anything – we were just very upfront."

Regarding the local employment at Nine Elms, at the construction level, there are not many locally unemployed people with the skills required on modern building sites. Another matter regarding local jobs is that finding skilled labour locally does not always match the needs of the construction employers. Therefore, it is a real problem to get local people skilled-up to take advantage of the construction employment. The expected finished development job requires 20,000 workers, of which 20% is ring-fenced for local people.

There is a local employment agreement and a local employment initiative job scheme which trains local people to skill-up for work in the local area and every developer needs to contribute towards that.

Respondent 4: "We have organised school visits, work experience, work placement and created apprenticeships. We tend to have a commitment to create 70 partnerships during the life of the project for 7 yrs."

The area, in terms of culture, has two aspects. One is that the area was originally industrial with no local community, and much of this commercial land has now been converted to mixed use. The other aspect is that the area around the Vauxhall Bridge and station which did include both housing and cultural uses before the development happened

Each developer has adopted a cultural strategy, and there is an overall Nine Elms cultural strategy. Nine Elms partnership and its other working partners like Vauxhall aimed to create one business improvement district that would cover all of the land in that area. They hoped to build on and to celebrate what

was there already, and also to create more cultural activity for the future. Taking part in a London-wide initiative, they planned to bring people to the area and also to work with organizations like Vauxhall One to construct cinema screens and a pleasure garden, and by working with businesses to expand the gallery quarter. These are some of the strategies by which Nine Elms intends to enhance the cultural meaning of the area.

> *Respondent 6: "Some galleries moved to this area and we also published a booklet which is the statement of what we are doing here, what our aspirations are, what cultural activities take place here and how we plan to build."*

Also the river plays a big part of the Nine Elms area and this is to be celebrated. Additionally there is a big focus of horticulture, a farmers' market and a flower market which is unique to the area. Moreover, celebrating food is one of its cultural intentions**.**

> *Respondent 3:"Council leaders are very keen on preserving the cultural meaning of the area as well as a place making term. We have done lots of work on health and community provision to local NHS and public health teams. We have done some community mapping of what are the exciting areas and what are proposed, what are the gaps and what we can do for that. We have two primary schools and we studied the impact on them and looked at bringing art galleries and all the cultural uses and trails."*

7.4.4 Quality Project (Project: Design, Efficiency, Spatial Justice)

Nine Elms project design considerations emphasise the importance of design, since the leaders of Lambeth and Wandsworth council were very keen on the quality of design. The very first architects on board were two of the world famous architect group - Richard Rogers and Fosters. The aim was to ensure all the developers got a quality architect on board.

Respondent 2: "We tried to make successful places where people like to live, work and spend time. We do this by trying to give careful consideration to how people might like to interact with space so we try to create places that have life. We try to create active frontage at ground level with residential above, with careful design of the open spaces between buildings."

Each development has to demonstrate building efficiency and sustainability through planning. Moreover, each council has sets of criteria that need to be met.

Respondent 7: "We have a district-heating network where the USA embassy will be the main hub in the north and all the development is going to get connected to that. Code 4 sustainable home and BREEAM is excellent."

Concerning the urban realm, within the general planning framework for the Nine Elms is a view of public space, where a park will be created. There are broad principles established for the public realm and one of the main objectives was accessibility and increasing access to the railway. These frameworks have to be followed by each developer. Therefore, the entire plan is being realised by different partners but it remains effectively a joint initiative. A suitable connection to the urban realm is evolving through the overall scheme.

TFL and the Nine Elm team produced a *Nine Elms landscape design guide* to look at the material and open space and linkages, and to ensure that the project links to the outside area. Regarding the landscape, they placed emphasis on matters like the linear park and intend to spend extra money on that.

Respondent 2:"At Riverlight, in order for the scheme to have maximum public space we tried to have minimum ground floor space, so we pushed all the parking spaces and refuge underground. 75% of the spaces at Riverlight are open spaces and 60% of those are public open space."

One of the main drivers was to connect the area with the wider city, since the area was isolated from the city because of the industrial site.

Emerging Issues – (Quality Project)

It is a widely held view by the respondents that for the Nine Elms project, a proper baseline investigation was conducted and the community was properly consulted before, and during, the construction phase. It is also believed that the project aimed to ensure high quality in terms of design, and that the sustainability aspect has been met.

7.4.5 Innovative Funding

The final criterion for the success of a MURP is to have an innovative sustainable funding model. Most financing issues were related to infra-structure funding, to pay for the northern line extension to the area. This was the single biggest hurdle to fund regeneration of the site, and it was decided to pay it through Section 106 of the Difts funding scheme. The way it works is through an increase of ticket sales to TFL, and the business rate on the commercial businesses would contribute and compensate the investment that has been set up by central government via the GLA.

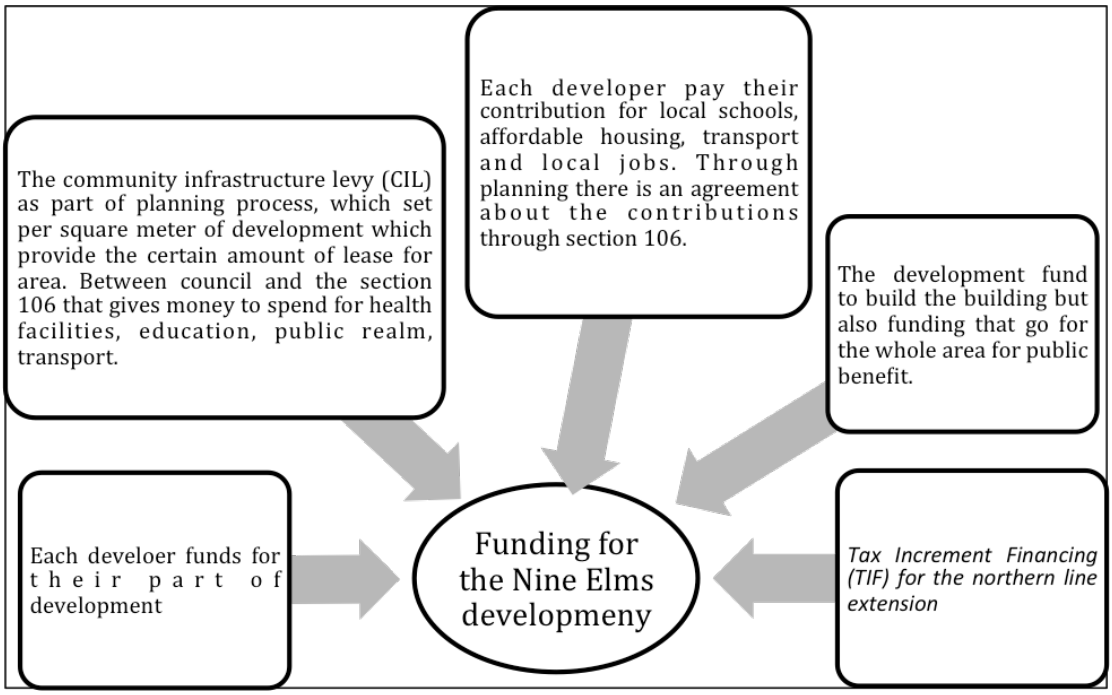


Fig 7.26: Nine Elms-funding Model, (Source: author 2016)

Respondent 7: "Developers realize that development can only happen if they contribute to the funding of infra-structure."

Respondent 3: "*Ours is development funding. We rely on debt to secure that we need to do a certain pre-sale before the debt becomes available. We are expected to pre-sale our units to release funding for phase two. Typically what we are finding when it comes to phase two, we need to pre-sale 50% of the units to satisfy the pre-sale to get funding for construction."*

The Nine Elms development is a private sector-led regeneration and the main funding for that has come from selling of land. The notion was to convert low value plots to high value residential plots Figure (7.26).

Respondent 2: "Our projects are funded around a balance sheet. At present the Barkley group doesn't have any gearing, so we don't have any borrowing and its funding through our balance sheet is from our own equity."

The landowners paid the actual funding of planning works. The funding for the tube extension to the northern line was partly funded via Section 106 from development and that left a very large cash flow.

Respondent 1: "The way to get round the infra-structure fund was dealing with treasury; the business rate uplift in the area TIF went to the Northern line extension. You don't get TIF until the development is done, so the treasury said if the GLA funds 1 million pounds for the tube line extension, the treasury would guarantee the loan. If everything goes well then the TIF would pay back the GLA money."

As explained in Chapter Three, the researcher examined the TIF mechanism in San Diego that formed part of California's regeneration policy. TIF is a well-known approach in US and there have also been three significant pilots in Scotland which appear to be viable from a financial and future policy perspective. They offer the potential for success, especially considering the

uncertainty normally associated with a pilot scheme. For these reasons, it was felt that TIF could prove a successful way to fund MURPs in London.

The Nine Elms project is financially innovative, being the first UK project of its kind to be funded through tax increment financing – which funds regeneration from improved tax revenues gathered from future businesses. This is obviously a risky strategy, as the hoped for tax revenue may never materialise. Nevertheless, the project has gone ahead, so that the former Battersea Power Station is already on stream, with retail, business and residential units already functioning, and it is starting to attract new businesses to the area through the formation of a new enterprise zone. An extension to the Northern Line is also anticipated, and should ensure transport to the 16,000 planned new homes, and for the 25,000 new jobs that should be created in the area. (Lambeth.gov) For this line extension, City Hall will contribute £1bn, with the Treasury guaranteeing repayment in order to reduce the cost of borrowing. Traditionally, such Enterprise Zones tend to offer big discounts on business rates as a way of kick-starting development. Nine Elms, however, will not offer such discounts, as it aims for the collected rates revenue (an estimated £660m) to be used over a period of 25 years to repay the Treasury for the construction of the Northern Line extensions (Ft.com). A further £270 million should come from Section 106 agreements in which developers pay local councils for local infra-structure – a fixed rate tariff. A further £245 million in community infrastructure receipts is forecast, and this is intended to help finance two schools, a park and surface transport improvements (wandsworth.gov).

Regarding the project milestones, each development is monitored against a whole series of KPIs, including employment charts which publish quarterly results on how these are achieved against the KPI chart. For example, they report how many schools have been visited and how many work placements have been organised. Also there are KPIs for getting funding agreement for the Northern Line extension, securing planning permission for the various schemes.

Project risks are complicated since the project is a major urban regeneration project where there is no single driver. London attracts a huge amount of

investment, so the market is favourable and that is driving the project forward. The financial value is that people find solutions to problems. The big risk for the Nine Elms was approval of the Northern Line extension fund because developing a new town centre depends hugely on infra-structure; the Nine Elms group worked hard with GLA and Transport for London to set the planning framework.

Table 7.10 explains various risks associated with the Nine Elms project, based on the respondents' views.

Flower market	1.	Finishing the construction of the building on time while the market begins to operate
	2.	Business continuity
	3.	Not losing any tenant.
Nine Elms	4.	Would the Northern Line go ahead?
	5.	Will the funding come as planned which depends on private partners?
	6.	What will happen in terms of the profile of the local area who will buy these plots?
	7.	Public issues, delivery of affordable housing.
Private developer	8.	Market collapsing
	9.	People like completing on contracts
	10.	Construction cost
	11.	Inflation
	12.	Contamination on the ground
	13.	Completion risk
Private developer	14.	Planning and the coordination within infrastructure and the market.
	15.	Risk of what density and how much affordable housing
	16.	Level of infrastructure funding to come up with planning application
	17.	Trying to work very closely with key infrastructure providers to ensure the design fits that
	18.	Market risk

Table 7.10: Nine Elms Risk, (Source: author 2016)

Respondent 6: "From the outset we needed a strong transport case and worked very carefully in terms of how that could be funded. And all of that was presented as a part of a general planning case in the public enquiry and was approved by central government."

Respondent 3: "The biggest risk is the completion risk. If the market fails and people pull out despite the fact that the contract and 20% deposit have been paid, people may not be prepared to complete. This represents a high risk for development these days, because of the long-term delivery commitment."

Respondent 8: "Very close to our site we had the Northern Line extension and Thames Tunnel. We need to future proof our design of the development so it could accommodate the tunnels coming under the site overly close to it."

Regarding the business model, each developer has its own finance and, therefore, needs a specific business model so that each model was created internally. There were very detailed business models for the TIF, including Section 106 repayments, which allowed the treasury to fund GLA that will cover the next 20-30 years.

The Nine Elms project investors were the developers, land owners and all the stakeholders as follows:

- Ballymore
- Covent Garden market
- BPS
- Barclay group
- Royal Mail group

Every investor's aim was mainly the area's overall success. Investors in the private sector want to see a return on investment, especially for developers who start development when the land was a good deal cheaper – they were certainly looking for a return. The land value has gone up in a short period of just four years, based on the market research.

Some respondents believe that capital appreciation and growth would be the main priority for private developers. Covent Garden's main interest would be the public social responsibility; Royal Mail's was the capital appreciation and corporate social responsibility. From a commercial perspective, they are largely attracted by the economic activity which the US and Dutch embassies would bring to the area.

> *Respondent 1: "Because we had a very strong framework in hand to make the investment very attractive in the area, it benefits from huge foreign investors. The main reason for international investment was security: they see it as a value. The market was favourable and the plan was backed by the UK national government, so this gives confidence."*

> *Respondent 7: "We appraise our schemes on a system cycle development appraisal system. We look simply at capital return employed and profit on cost in terms of viability for investment."*

Regarding the investors' priority for the Nine Elms development, different respondents have different views. (Table 7.11)

Nine Elms	Investors priority
Covent Garden	19. Minimizing the risk by selling the plots. 20. Public social responsibility 21. Transforming the area
Philip	22. Capital appreciation is very important. 23. It is very important to have GLA behind the project.
Residential perspective	24. They were attracted to London as a region and as a world class city 25. Need for private rented stock. They also were entered to buy in first phase of London largest regeneration area. 26. Also the new infra (confirmation of GLA for the infra)
Commercial	27. Economic activity the project would bring to the area
Royal Mail	28. Capital appreciation 29. Cooperate social responsibility
Berkeley and BNP Paribas	30. Capital appreciation 31. Growth.
Local authorities	32. Making sure that local people get benefit in term jobs, more public space.

Table 7.11: Nine Elms Project Investor's Priority, (Source: author 2016)

Emerging issues – (Innovative Funding)

The Nine Elms regeneration development is situated in a prime London location next to the River Thames. Its development has harnessed an iconic heritage to cater to the mainly high-end foreign demand for low risk property investments with ancillary lifestyle spin-offs. The government has subsidised the development via infra-structure funding. The ethical justification for pumping public funds into central London remains contested, as has already been argued – the UK is a highly spatially polarised nation with arguably excessive investment in London to the neglect of other regions. There is a question about whether this type of public-private partnership can work, with the private sector running the project.

Since the money took time to be released from the public sector, it is believed that the private sector moves faster in the delivery of their part. While most of the project investors are private developers, their ultimate aim seems to be capital appreciation and growth, under the umbrella of the Nine Elms team. The Nine Elms development main funding is through sale of land.

After the infra-structure fund, the next biggest risk for Nine Elms is the completion risk, as the project is complex due to a very vast number of involved stakeholders and many actors; this will need to be completed in long phases.

7.6 Conclusion

This detailed analysis of three case studies of MURPs in London was conducted in order to identify different finance models, type of partnerships and their structure. This chapter is based on evidence from the three case studies, the second component of the triangulation strategy employed for data collection in this thesis. In particular, this chapter addressed Objective Five of the research, which is to validate the model through investigating governance mechanisms, project quality and funding models utilised in MURPs in London.

Hence this chapter has focused on understanding the issues facing such projects in order to investigate the complexity of institutional, structural and cultural factors at play from the point of view of academics as well as the firms

involved. The adoption of three large MURPs in London strives to explain each particular project at hand with the possibility of making general conclusions, due to the typicality of the projects. Additionally, the aim of this chapter was to develop a guideline for evaluation of current and future urban mega-projects by justifying the proposed draft framework (Chapter Five). The next chapter will evaluate these case studies based on the justified draft framework and will finalise the outcome of this research by testing the model based on 32 semi-structured interviews and the result of the three case studies discussed in this chapter.

8|Result

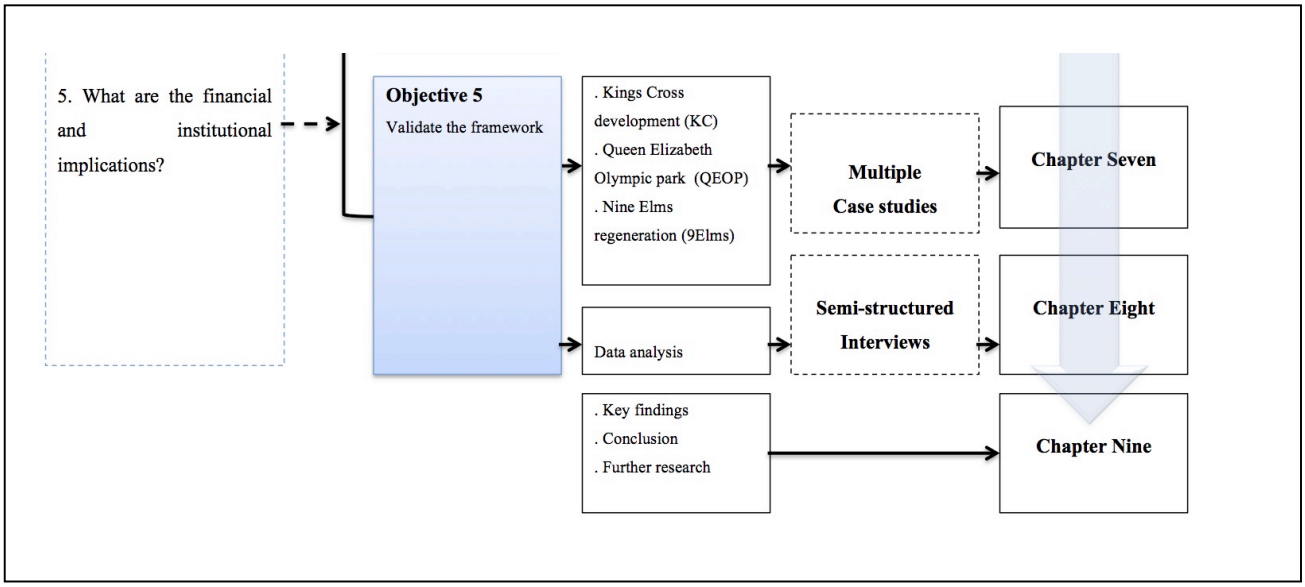


Figure 8.1: Thesis Structure (Corresponding Objective, Methodology and Chapter Structure)

Chapter 8: Results

8.1 Introduction

Chapter Seven applied the Mega-Urban Regeneration conceptual framework to case studies of three MURPs, with a view to evaluating institutional integrity, project quality and innovative funding. This chapter uses the case study findings to identify vehicles employed in the delivery of these urban regeneration projects in order to evaluate their performance.

Building on evidence from 32 semi-structured face-to-face interviews, this chapter represents the third component of the triangulation strategy employed for data collection in this thesis (see Chapter Four). Interviews were conducted with senior managers, senior public policy makers, architects, planners, lawyers and social entrepreneurs who were involved in the aforementioned projects. Some of the interviewee respondents were the same person as the structured interview case studies and some were experts in the field who were not involved in the projects.

This chapter consists of two parts. The first part presents an analysis of the case studies, using the MURP evaluation framework to identify key emerging themes. The second part validates the proposed model as an evaluation model via 32 face to face interviews with key stakeholders and experts. This chapter brings together and discusses the overall findings of the research.

8.2 Evaluating MURPs in London: a Summary of Three Case Studies

In order to test the draft explanatory mega-urban regeneration project evaluation framework (see Chapter Five) three case studies of London MURPs were investigated. Primary evidence came via interviews with senior managers, senior public policy makers, architects, planners, lawyers and social entrepreneurs. Responses from the interviews were codified using NVIVO software for qualitative analysis to enrich the debate by providing real life experiences and examples from the respondents for elucidating the points under discussion. The interviews gathered different views and experiences regarding

these projects with particular emphasis on a range of public, private and public private organisations. With that in mind, the research selected three projects:

- King's Cross development (Case A)
- Queen Elizabeth Olympic Park (Case B)
- Nine Elms (Case C)

Results

The draft explanatory framework (Chapter Five, figure 5.2), identified that the critical factors to impact project success would be:

- Smart institutions
- Quality projects
- Innovative funding

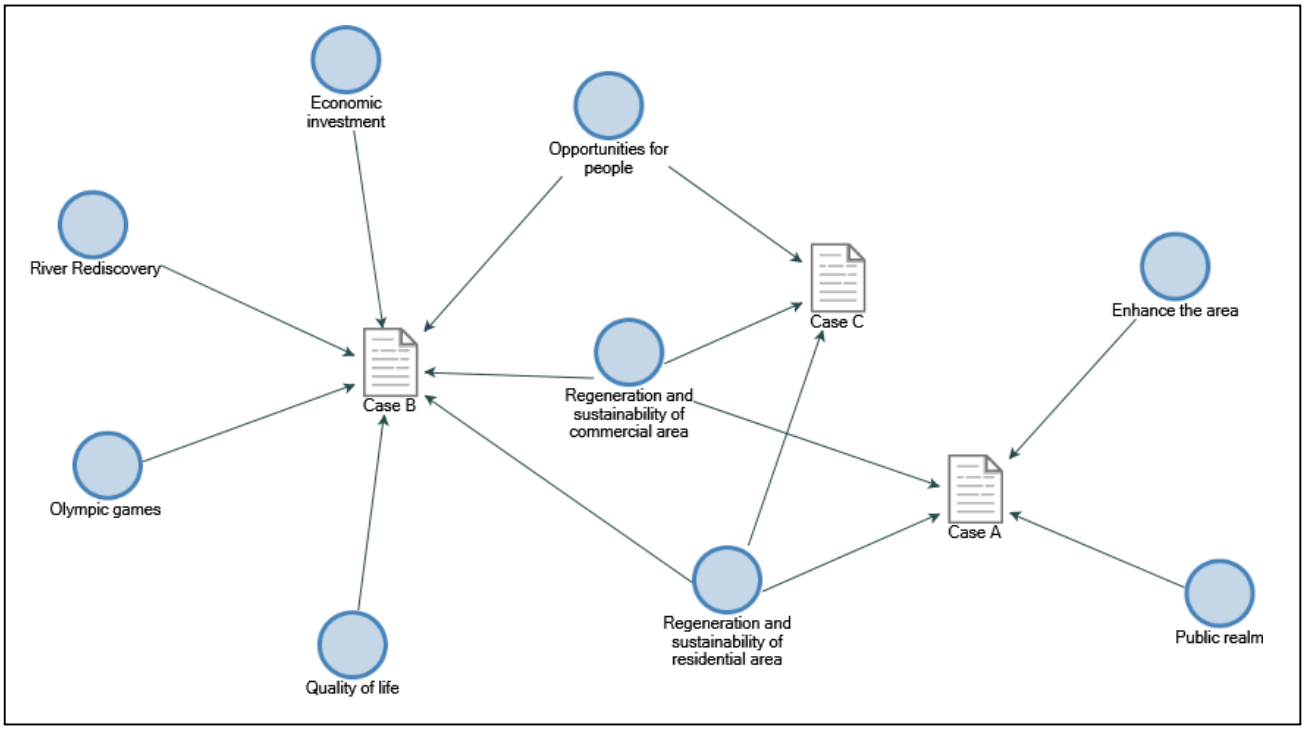
The empirical case study investigations found that in reality, the situations were a little more complicated. However, it is useful to reflect on each of the factors in turn.

Key Objectives

One of the main issues emerging from the literature review is that each project needs to have clear objectives, and for a project to be considered successful, each objective needs to be addressed. The purpose of inquiring into the project objectives was thus to see to what extent stakeholders have achieved their objectives.

All three projects had similar objectives. The key objectives of the King's Cross development project were to connect the public realm with the regeneration and sustainability of both the commercial and residential fields, as well as enhancing the area as a whole. In addition to bringing the Olympic Games to London, the primary objective of the Queen Elizabeth Olympic Park was the regeneration of the eastern part of the city. The secondary objectives included the rehabilitation of the River Lea valley and the facilitation of economic investments in this location that would improve the quality of life as well as the opportunities for people who live there. The main idea behind the Nine Elms project was to create a new district, taking advantage of its central location, to enable an existing low-density area to be replaced by a high-density and high-quality development to meet the needs of residents and employers. Other objectives were ensuring that local people would gain improved access

to jobs and affordable housing. It is interesting that none of the interviewees mentioned any objectives relating to getting profit from the project when responding to questions about the key project objectives.



Figur8.2. Key objectives map, generated by NVIVO software.

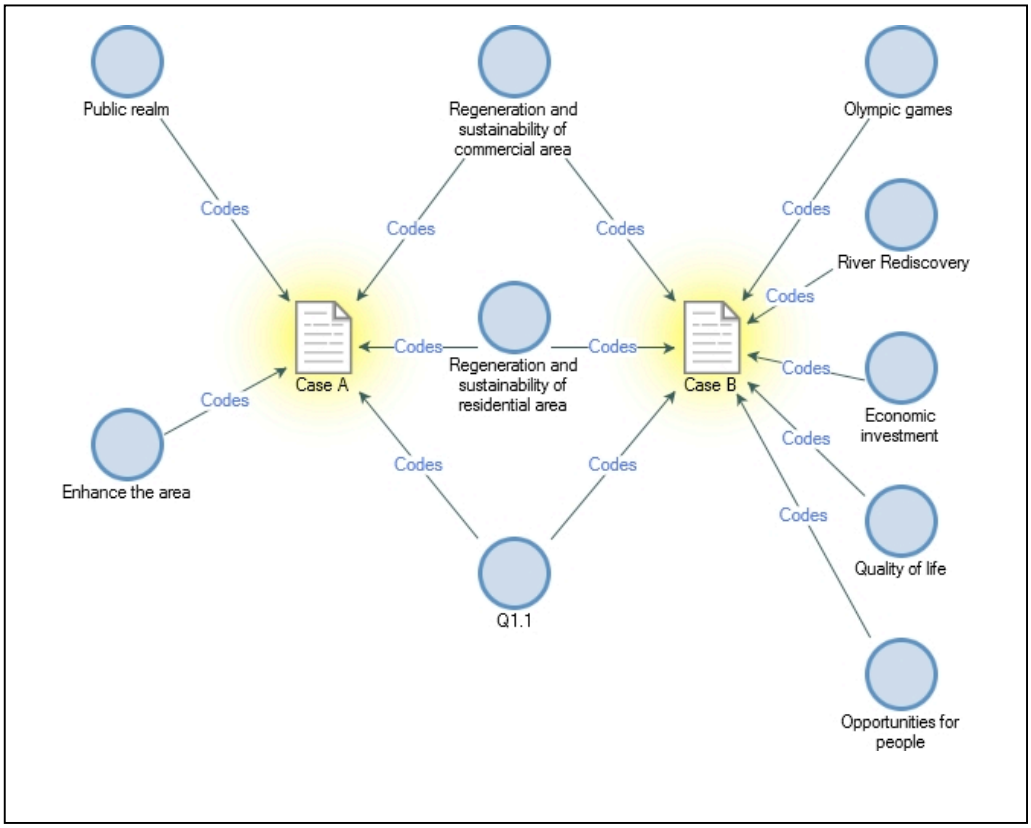


Figure 8.3: Project Key Objectives Case A and B, Generated by NVIVO Software

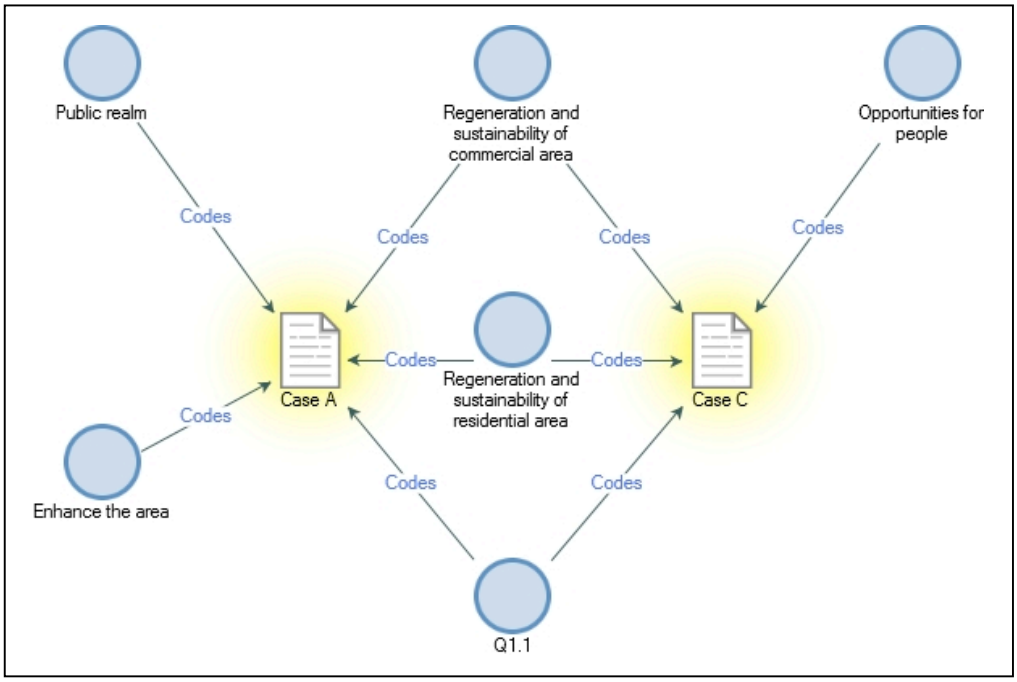


Figure 8.4: Project Key Objectives Case A and C, generated by NVIVO software

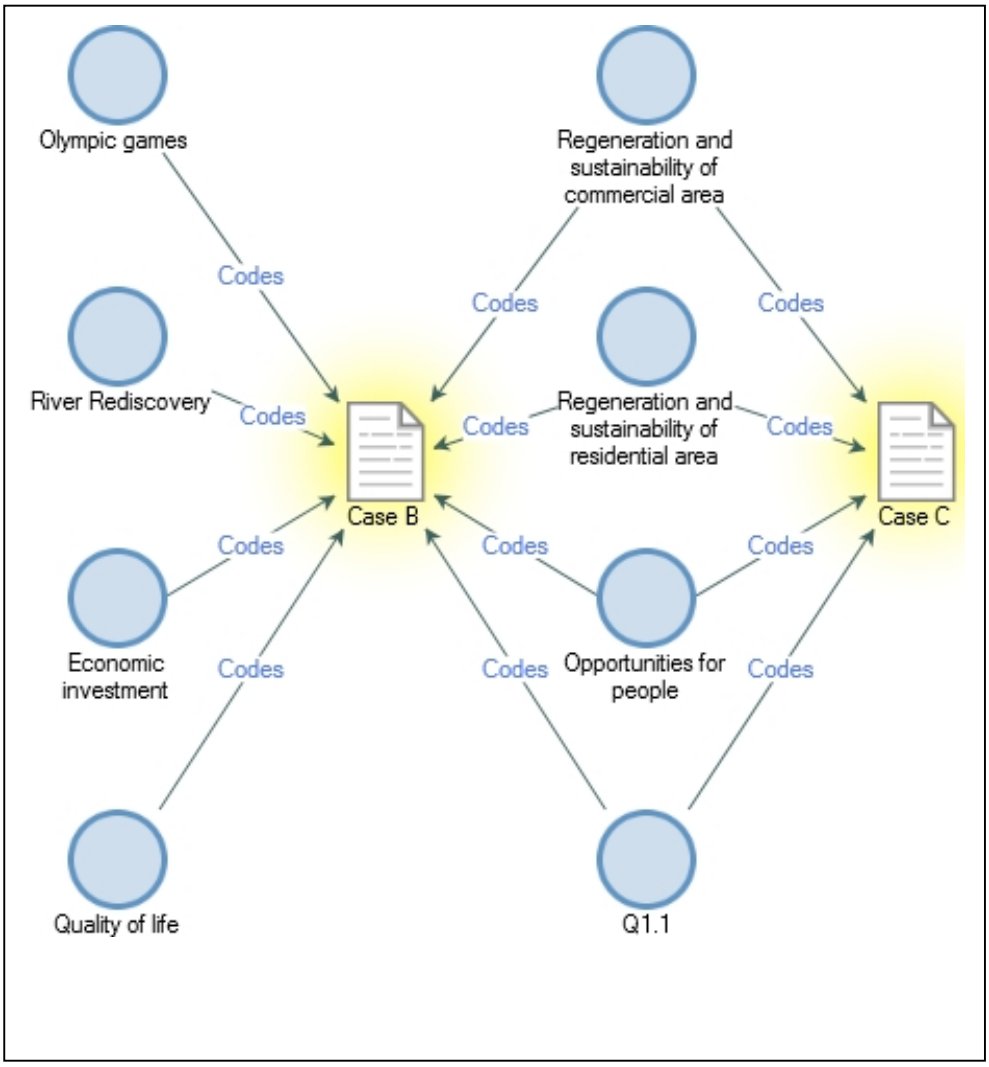


Figure 8.5: Project Key Objectives Case B and C, Generated by NVIVO Software

As illustrated in Figure 8.3 the Kings Cross development and the Queen Elizabeth Olympic Park project had common key objectives of regeneration and sustainability of commercial and residential areas. Similarly as shown in Figure 8.4 Kings Cross development with the Nine Elms project had similar common key objectives of regeneration and making sustainable residential and commercial spaces for residents. Apart from these two key objectives, creating opportunity for people is another common objectives between the Queen Elizabeth Olympic Park and the Nine Elms development. (Figure 8.5)

Main Partners

Delivering on each project objective and aspiration requires a partnership approach. Recognition of each partner's relative strengths and weaknesses in delivery is essential to ensuring that the benefits and opportunities created are spread appropriately, in a timely fashion, beyond the immediate boundaries of the site. Different partners were involved in these projects (Table 8.1). In the King's Cross development project there was a property unit trust in which various investors injected the capital. One half of the units was owned by the original landowners and the other half was owned by a real estate development company (the Argent Group). In the Queen Elizabeth Olympic Park project, the only investor was the London Legacy Development Corporation. The Nine Elms project involved the largest number of partners, including the Boroughs of Lambeth and Wandsworth, the Greater London Authority, Transport for London and the landowners. Analysis of case studies reveal that the number of partners in these MURPs varies from one to more than five. (Figure 8.6)

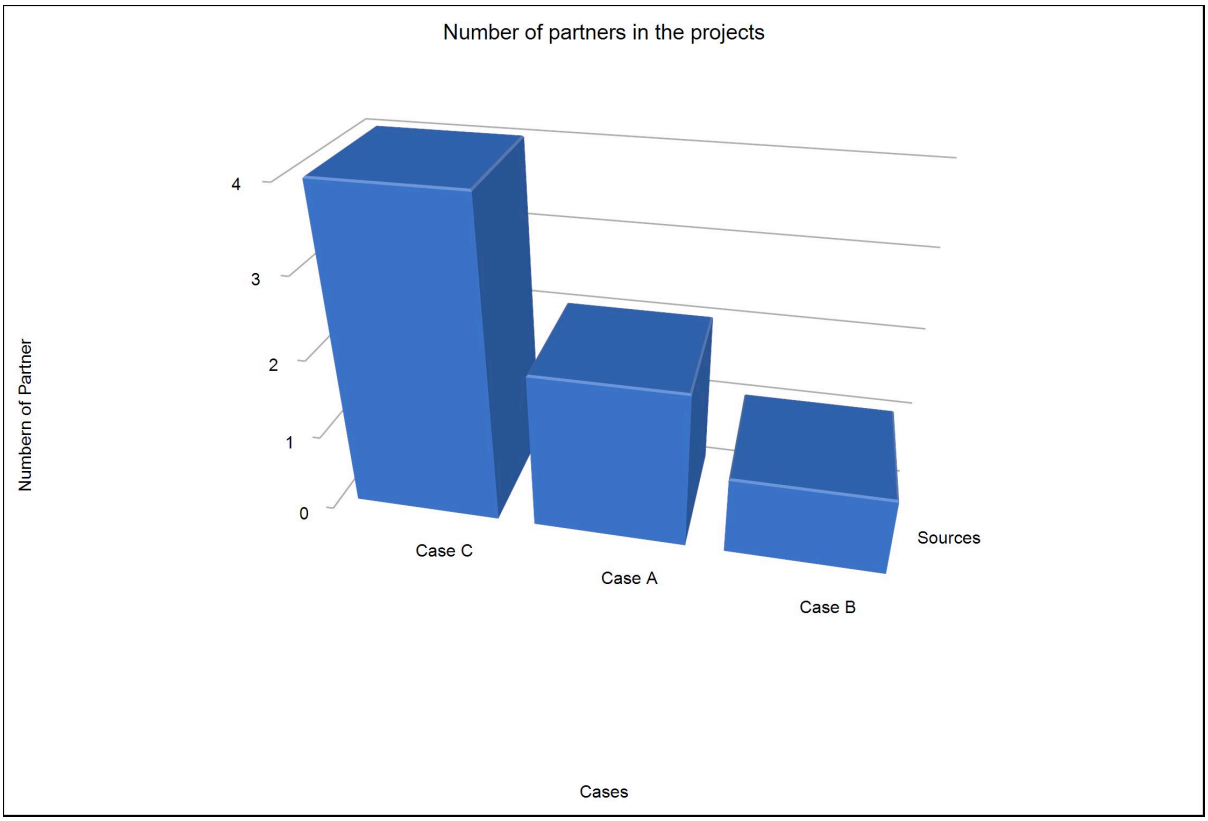


Figure 8.6: Number of Partners in the Project (author, 2017)

Project	Partners
Kings Cross	Original landowners Real estate development company (the Argent Group)
Queen Elizabeth Olympic Park	LLLD
Nine Elms development	Boroughs of Lambeth and Wandsworth Greater London Authority Transport for London The landowners

Table 8.1: Project Partners Chart (author, 2017)

Structure of the Partnership

The review of the literature suggests that collaborative institutions either negotiate or muddle through. The purpose of analysing the partnership structure was to determine whether the project is well-governed with a proper organisational structure, oversight, controls and feedback. As regards the structure of the partnership in King's Cross development project, landowners, London Continental Railways who owned most of the land, and the High

Speed One agreed to organise land assembly and ownership. Afterwards, they injected the land into a partnership and went to find a development partner. As already stated, in the Queen Elizabeth Olympic Park project, the London Legacy Development Corporation was the only partner. In the Nine Elms project, the special purpose vehicle was under the Nine Elms Board which was co-chaired by the leader of Wandsworth, the leader of Lambeth, the Deputy Mayor of London, representatives from the Transport for London and landowners. According to interviewees involved in Nine Elms, the reason for this political line-up was to make the project workable. (Figure 8.7)

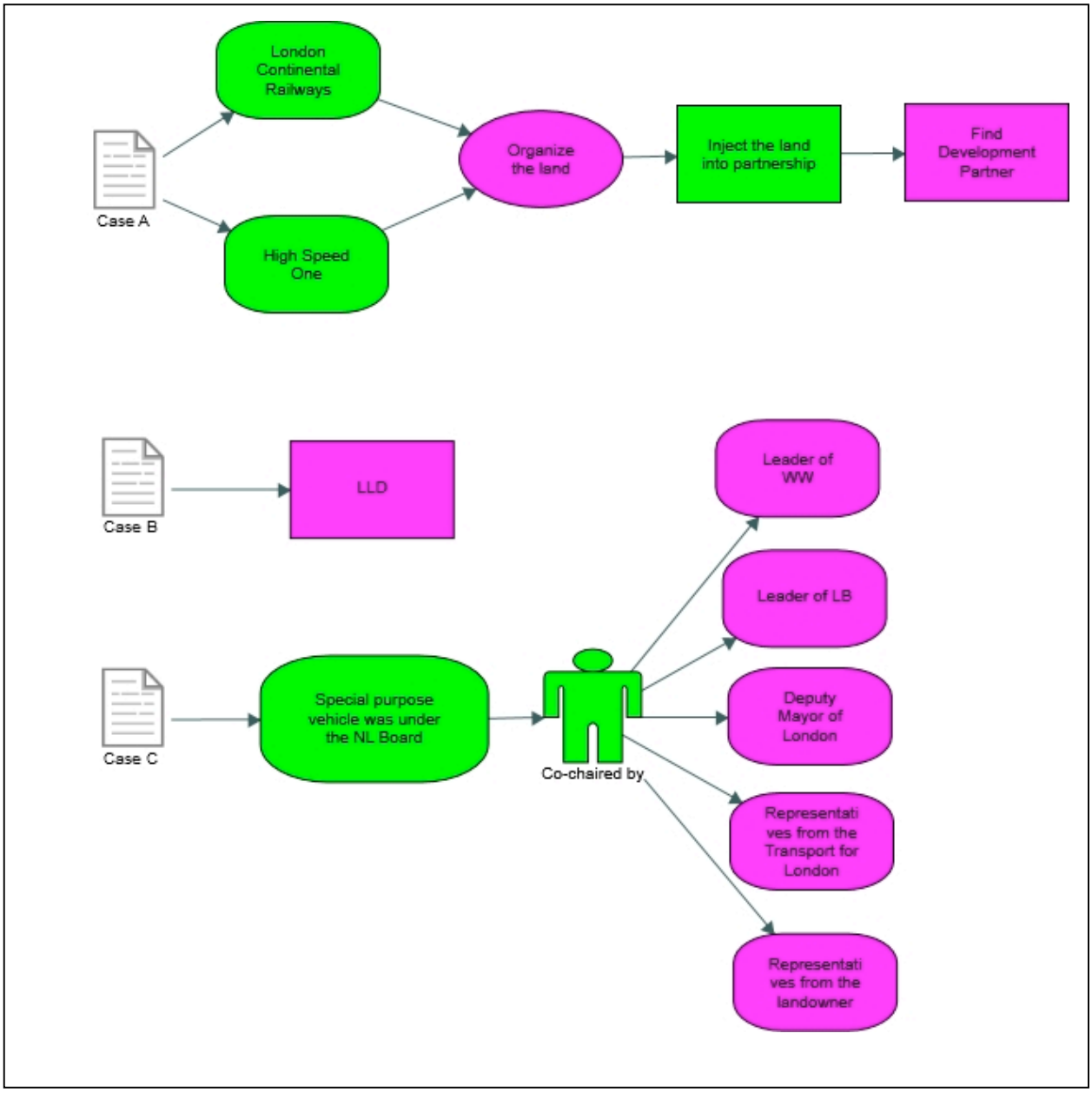


Figure 8.7: Structure of Partnerships (author, 2017)

Key Considerations in Formulating the Project Vision

As per the draft framework, one of the principles for successful development is the need for a clear vision. Having a credible and inspiring project vision significantly de-risks projects. Most major regeneration projects in recent years have failed. With that in mind, in the King's Cross development project one major consideration was how to fund it while avoiding the risk of losing all the investment. Looking at cost and value was key to the preparation of the project vision. Heritage was also considered very important and would need to be retained. The King's Cross development vision was intended to create a wide range of activities for people. Establishing a viable sustainable community and advancing the regeneration of the area was the key consideration in creating a project vision for the Queen Elizabeth Olympic Park. The big ambition of one of the poorest areas of London was simply to become an average one. The main vision behind the Nine Elms project was to develop London as the world city. This vision was inspired by the desire of better utilisation of the land by creating a high-density residential development, learning from other countries. (Figure 8.8)

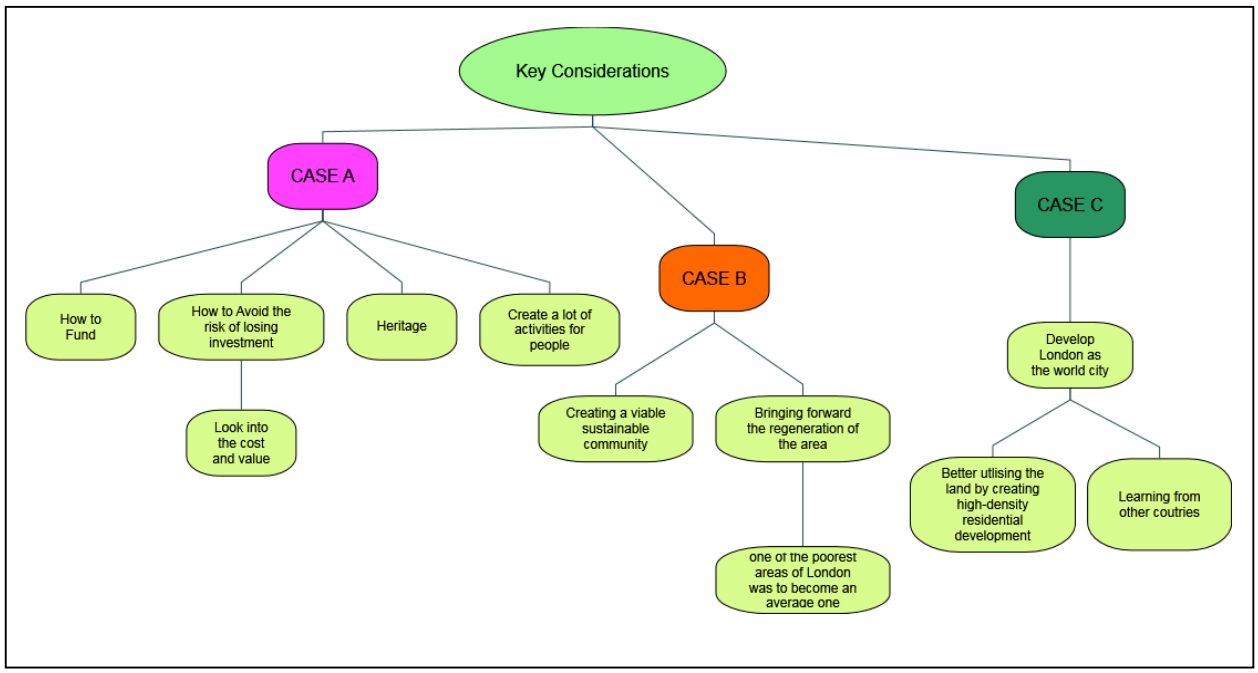


Figure 8.8: Key Considerations in Formulating the Project Vision

Specific Techniques/models Employed

In order to create a robust planning model, it is important to implement innovative models and techniques. Models used today as a tool for urban planning can help us better understand the complex urban organism. As stated by Chorely et al (2013) models represent the most important relationships in a system and facilitate the generation and comparison of alternative planned future population, employment, retailing, transportation and land use.

In the King's Cross development project, all standard techniques (such as EIA, transport modelling, impact assessment on community, impact on local housing and jobs, health assessment) were used. Every single project was BREEAM rated for environmental assessment. Other techniques were also used, including scenario planning which assesses the area from a tourist or resident perspective. In Excel spreadsheet, all activities of project moving forward were monitored and combined with the GIS. They were modelled on a plot-by-plot basis. After the master plan was developed, consultation engagement techniques were carried out, such as pop-up events, walk-and-talk, mapping exercises and sessions in which the public were asked about what matters to them with the scheme. In the regeneration of the Queen Elizabeth Olympic Park, all required assessment models such as transport assessment, impact assessment, strategic assessment, sustainability appraisal and EIA were used. In the Nine Elms project, transport modelling was conducted. Each individual application had an EIA. A vision impact assessment of the area was conducted from various points of view. From the interviewees' statements, it can be concluded that different techniques were employed in different projects.

Long-term strategic goals

Properly managed, a MURP should avoid any kind of financial manipulation, and should incentivise those projects that promote desirable outcomes such as environmental improvements, or health or education elements. MURPs can run the risk of being extractive or predatory; this can be avoided by consulting widely and hosting regular and purposeful discussions about the progress of the project. The Kings Cross project was intended to be more than simply another business or office district, but one which would combine cultural and social elements into the general mix, whilst also opening the project up to the rest of north London and the wider world.

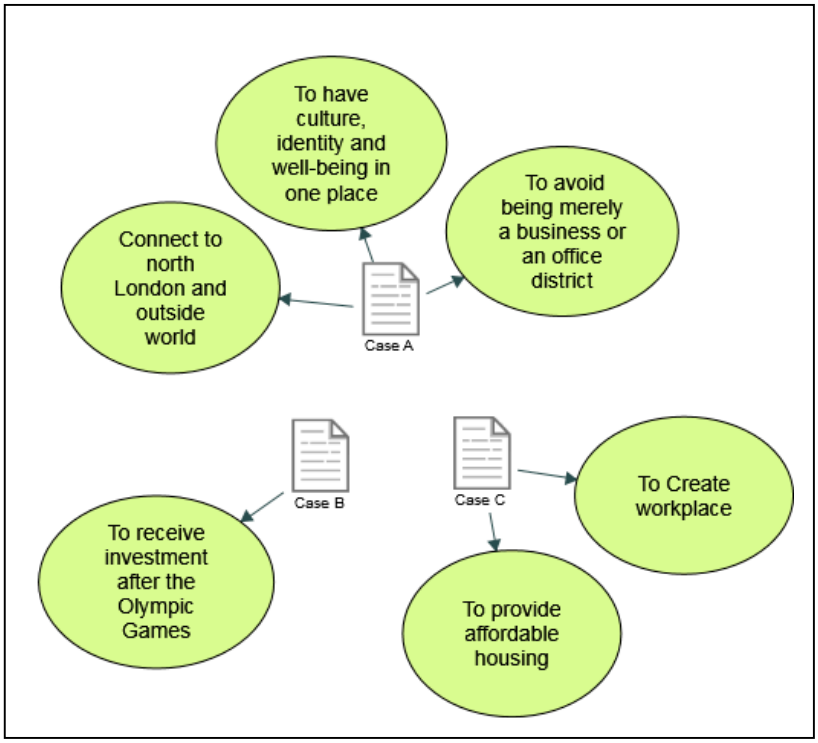


Figure 8.9: Project long-term Strategic Goals

The strategic goal of the Queen Elizabeth Olympic Park was to receive investment after the Olympic Games and to ensure continuity and a long-lasting legacy. The Nine Elms strategic goals were to provide affordable housing and create workplaces. All projects had long-term strategic goals, although these goals differed. (Figure 8.9)

Structure of the Project Board

According to the literature, Smart institutions should both foster quality growth and curtail its extractive modes (Huston, et al., 2015). The structure of the various project

boards differs. In the King's Cross partnership, the Argent Group board has management focus: it overviews the performance and key decision-making.

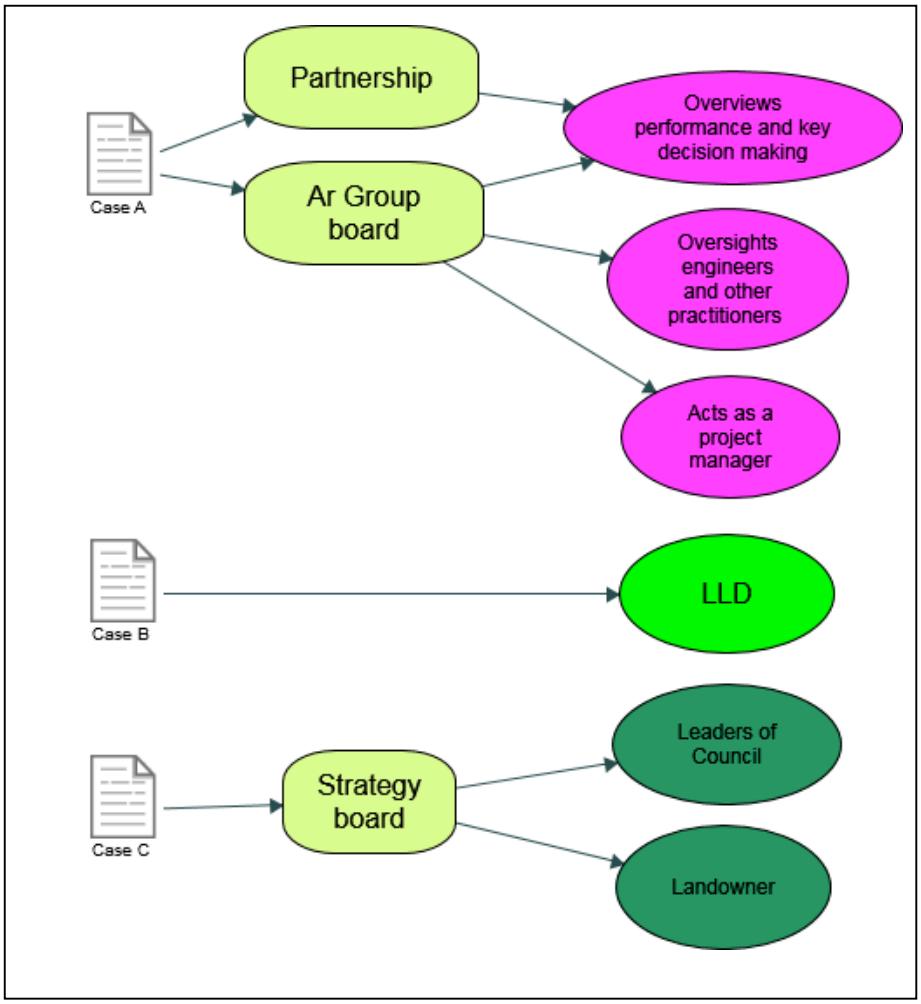


Figure 8.10: Structure of Partnerships Boards

There is also Arup design and engineering group that oversees engineers and other practitioners and acts as a project manager. The London Legacy Development Corporation operates the Queen Elizabeth Olympic Park and owns most of its venues, while the Nine Elms strategy board is constituted of council leaders and landowners. (Figure 8.10)

Project Oversight, Controls and Feedback Mechanisms

Sustainable institutions should have robust project oversight, control and feedback mechanisms. Project oversight depends on the structure of the partnership and the project board. For example, in the King's Cross development, the Argent Group board has the management focus and overviews the performance and key decision-making, reports to the King's Cross central partnership on a monthly basis regarding questions about new buildings, tenants, environmental issues, finances, and so on. The Arup group

oversees engineers and practitioners and also acts as the project manager. There is also a community feedback process. On the other hand, the London Legacy Development Corporation, which operates the Queen Elizabeth Olympic Park, is an independent corporation that reports directly to the Mayor of London and local authorities. The QEOP strategy board sets the direction and the objectives for the partnerships on an annual basis in the business plan, and the London Legacy Development Corporation judges its performance against it. The Nine Elms group publishes a business plan every year that sets out their overall aim and objectives and highlights priority projects. The action plan relates to the business plan and sets out project milestones. The progress is reported to the strategy board on a regular basis. (Figure 8.11)

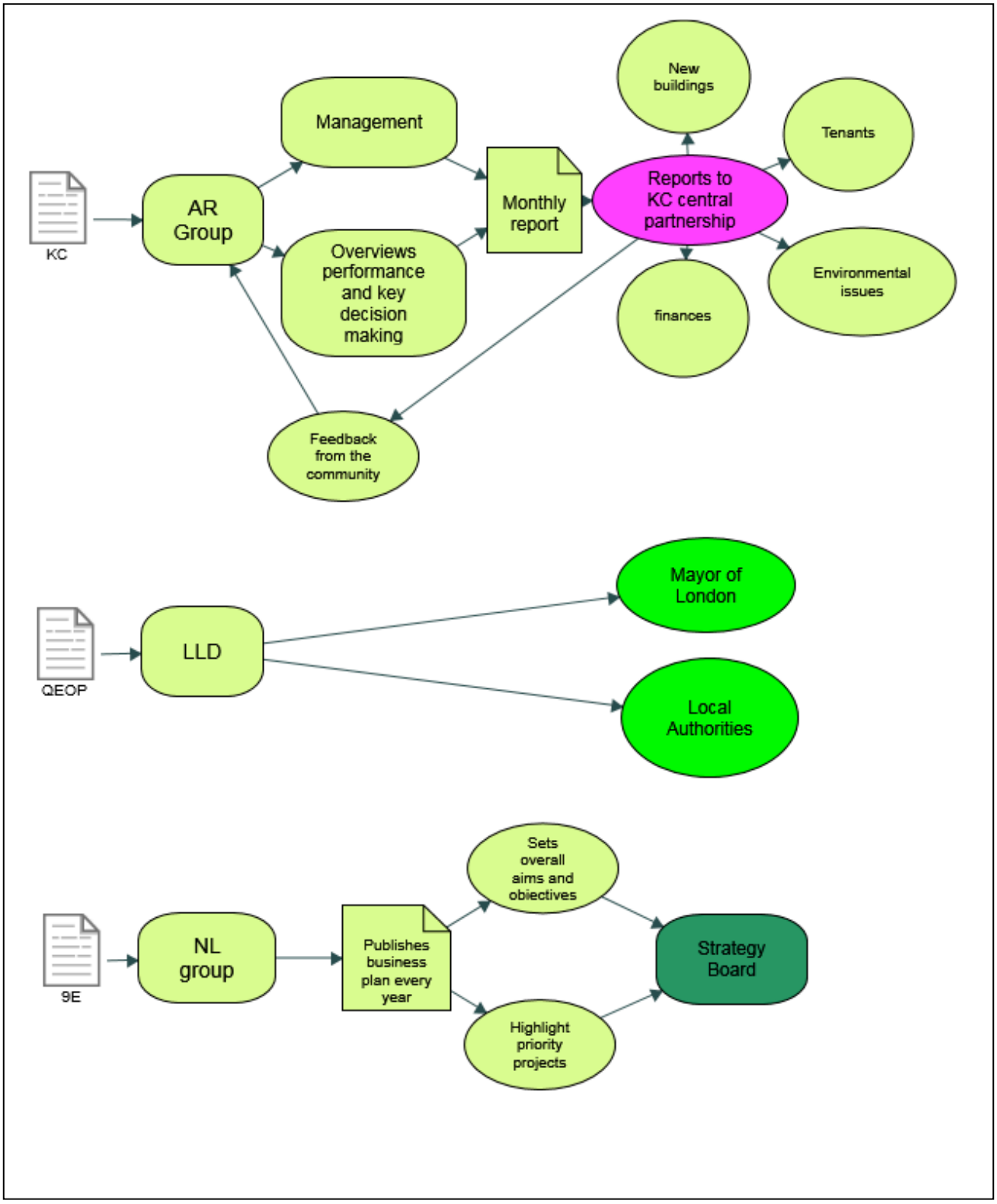


Figure 8.11: Project Oversight, Controls and Feedback Mechanisms

Control Mechanisms to Ensure Stakeholders' Accountability

The structured literature review suggested that successful projects need a control mechanism.

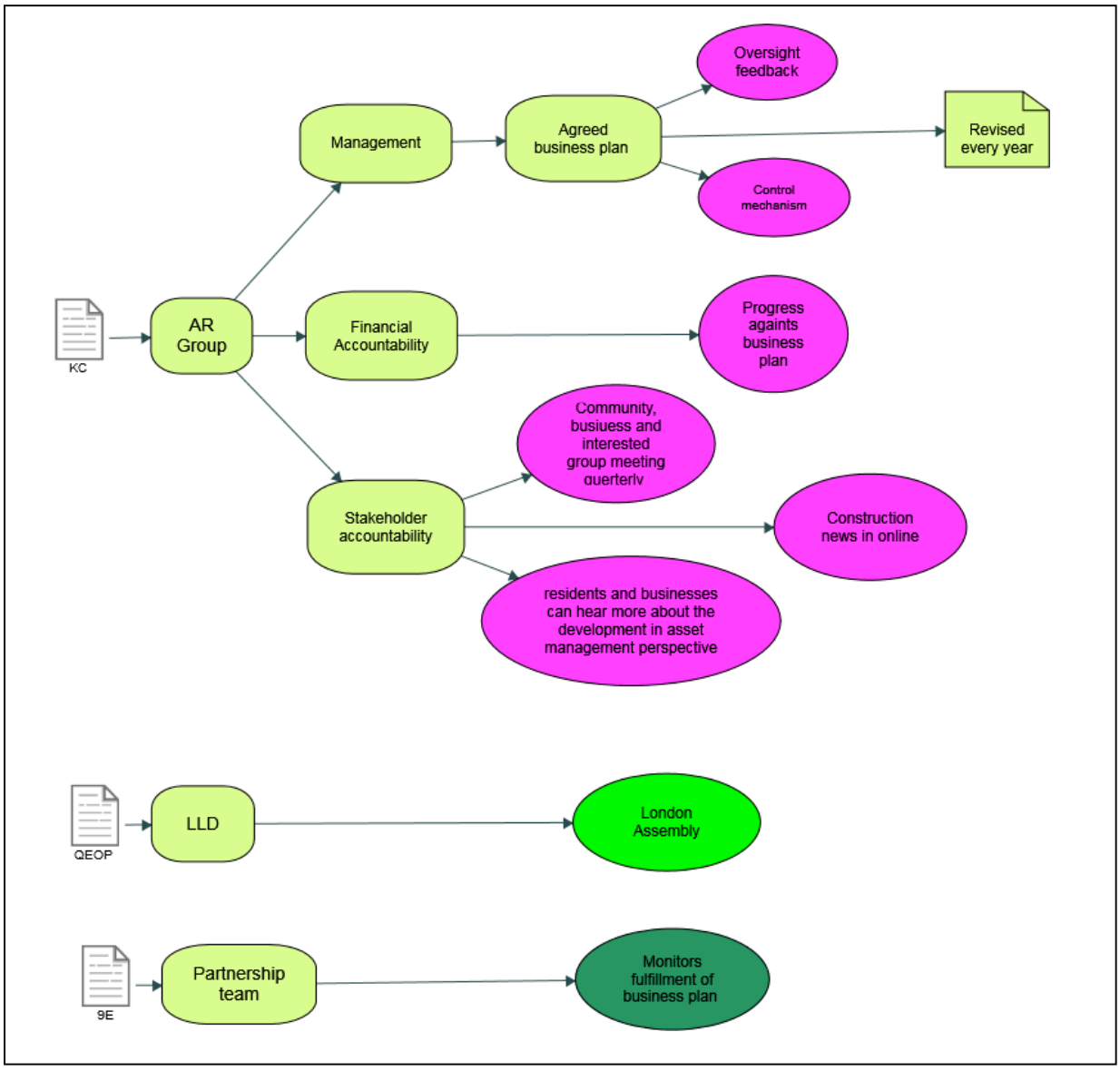


Figure 8.12: Stakeholders 'Accountability Chart

For the Argent Group, the agreed business plan was the lynchpin of the oversight feedback and control mechanism. The plan is refreshed and revised every year. In terms of financial accountability, progress is plotted against business plan targets. Other stakeholders' accountability includes communities and affordable housing. Meetings of the construction impact group – where local residents, local businesses and other interested parties can come to hear about the development – are hosted by the council once a quarter. Each party receives a copy of the air quality and noise report. In the King's Cross

development, residents and businesses can learn more about the development in an asset management perspective. The construction news is available online. The London Legacy Development Corporation, as a Mayoral organization, is accountable to the London Assembly for the Queen Elizabeth Olympic Park. The Nine Elms partnership team monitors the Nine Elms group's fulfilment of the business plan. They ensure compliance with the guidance that has been provided and highlight any potential discrepancy (Figure 8.12). In short, the empirical investigations confirm the importance of the feedback and control mechanisms.

Geographical institutional framework

The literature suggests that it is important for effective project delivery to have an appropriate geographical institutional framework. While much strategic transformation is characterised by a top-down approach (Freedman, 2014) smart-SUR strives to include bottom-up elements, and to be responsive and inclusive. Stakeholders involved in the King's Cross development project report that communication with Islington and Camden council was open and transparent, while those who worked on the Queen Elizabeth Olympic Park say that the public accountable body was not quick enough in decision making for a development of this scale. The Nine Elms project had quite an unusual arrangement in which private partners owned all the land while the public sector had no land interest (Table 8.2). The downside of this arrangement was that some of the infra-structure and structural issues were not addressed as quickly by the public sector; this means that now they need to catch up with the private developers. It can be concluded that people involved in different projects have had different experiences with the institutional framework and its efficacy.

	Institutional framework
KC	Communication with Islington and Camden council was open and transparent
QEOP	The public accountable body was not fast enough in decision making for a development of this scale
9E	There was quite an unusual arrangement because private partners owned all the land and the public sector had no land interest

Table 8.2: Project Institutional Framework

Stakeholders' Coordination at National, Regional and Local Level

Much of the literature stresses the importance of effective stakeholder co-ordination. A properly run sustainable MURP would consult widely, with genuine and inclusive mechanisms and a transparent process. All of this local dialogue should balance any problems caused by a top-down leadership approach. (Hemphill, Berry, & McGreal, 2004)

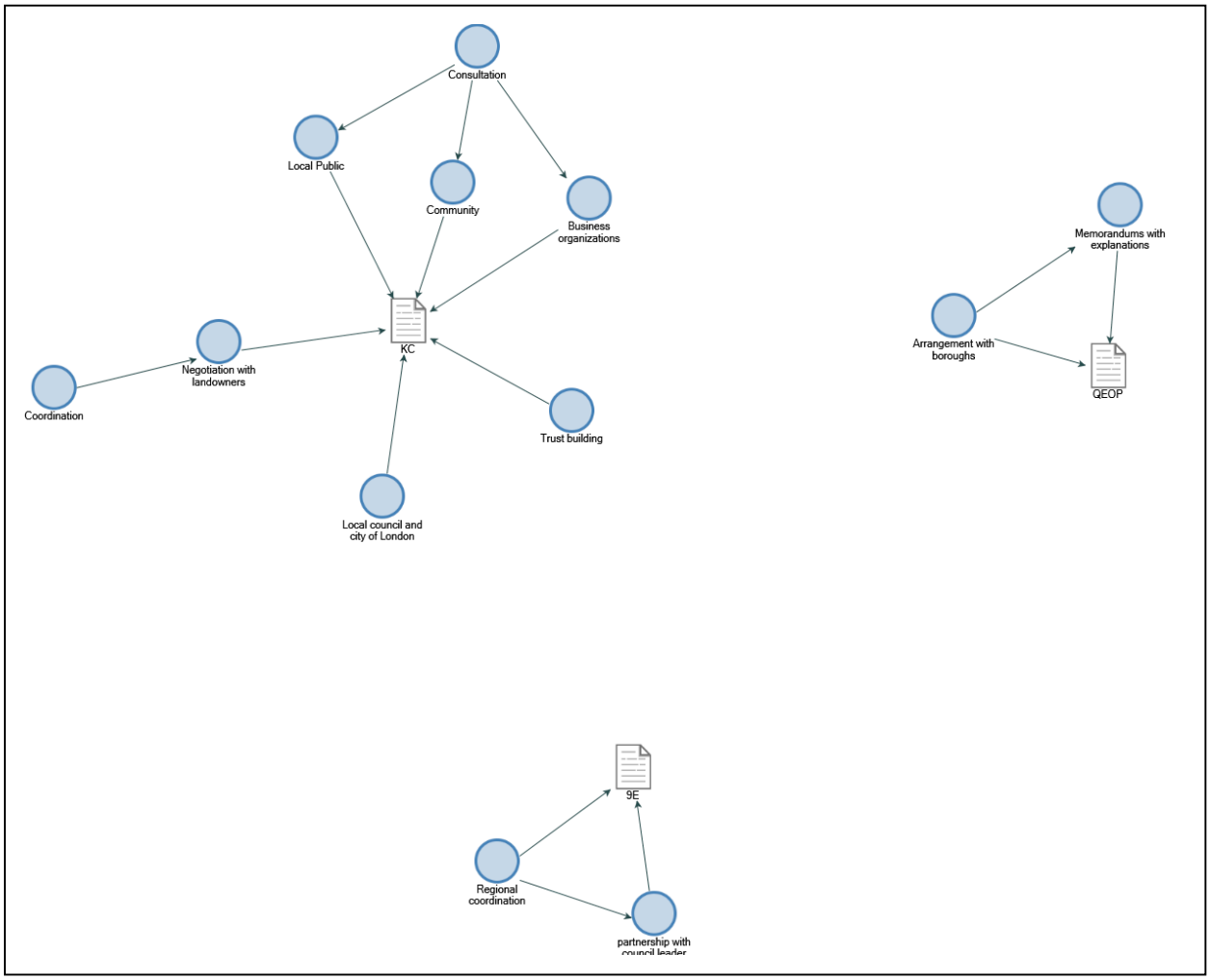


Figure 8.13: Stakeholder's Co-ordination

The King's Cross development project had a great deal of engagement from the local council and the City of London to ensure that the development was appropriate and that consultations were taking place with the community, local public and businesses. Stakeholders' co-ordination was achieved through the process of negotiation with landowners. The process essentially consisted of creating a joint venture and then building trust between the partners. In the Queen Elizabeth Olympic Park project, co-ordination was planned through a

formal arrangement with boroughs. Memoranda were prepared with explanations for better understanding of the work that was being done. In the Nine Elms project, co-ordination was more regional than local. The regional engagement was provided through representatives in the strategy board. The Nine Elms project was achieved through consensus and partnership with the council leader. The team and developers were very positive about this process, although the partnership was quite unusual because it did not have a legal status. It was a result of landowners having to work together to plan the common infra-structure within the planning application process (Figure 8.13).

Process of Community Consultation

Smart Institutions remain close to the needs of the people they ostensibly serve and, therefore, they regularly consult with local residents. In all three projects, community consultations were organised. In the King's Cross development project, the Argent Group asked a panel of local people and residents to act as a sounding board for advice. The local residents thought young people, particularly, should gain benefits from the project. In order to win the original planning permission from the local authority in 2004, the Argent Group published the documents in which it was described how they consulted the community around the area, and what people thought about the project. Local people asked for a clean, safe and accessible site which would provide an opportunity for their children. The Argent Group met their expectations. The second phase of the process meant getting locals involved with the activities (for example, through the creation of a new access centre).

The London Legacy Development Corporation broadly communicates with the local community about the Queen Elizabeth Olympic Park project through face-to-face meetings, as well as informal meetings around the park. The Park panel is assembled from community members and organizations that help local residents with particular problems. There is also a youth panel, with an idea of involving young people in the shaping of the Park's future. Local residents are also very actively involved in the development of the Park by running various community events. The London Legacy Development Corporation has a working partnership with venue managers to bring universities, businesses and communities to the Park.

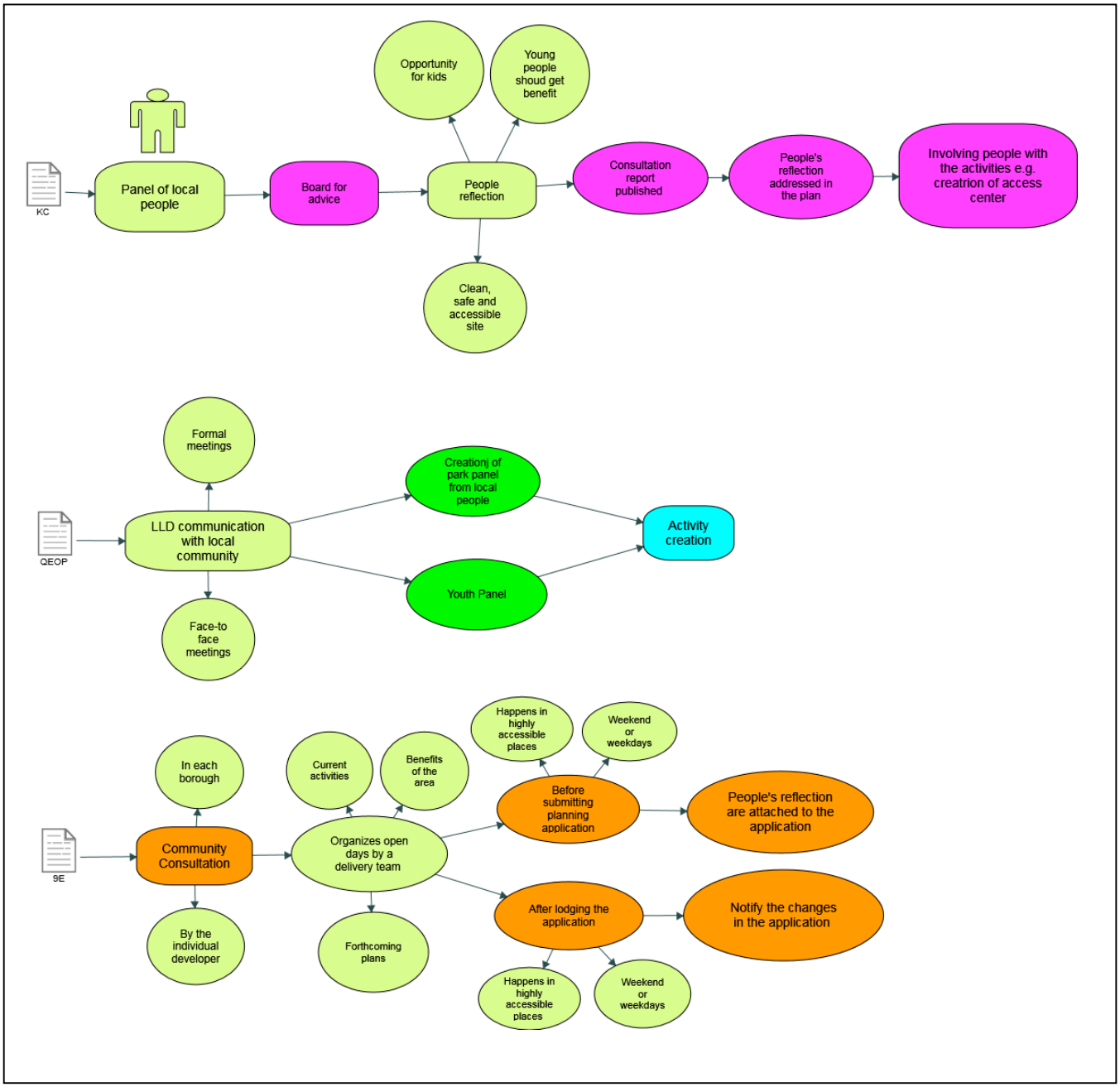


Figure 8.14: Process of Community Consultation

To obtain planning permission for the Nine Elms project, community consultations were organized in both boroughs. Each developer also undertook their own consultations as part of statutory requirements. Furthermore, a delivery team every year organises open days and shows to promote what is happening in the area, and to explain forthcoming plans and the benefits to the local area. This is done in two stages: prior to the making the planning application and, again, once the planning application has been submitted. The

consultations took place at highly accessible local venues, during weekdays, on evenings or at weekends, to ensure that respondents would be able to come. Their views and comments were submitted as part of the planning application. Once the planning application was made, people were informed of what changes had been made and where (Figure 8.14).

Baseline Investigation

Baseline investigation at the commencement of the project is very critical. In all three projects, a baseline investigation was conducted. For instance, an environmental impact assessment and analysis of air quality and historical context were conducted for the King's Cross project.

Expected Contribution to Local Employment Creation

One of the main objectives of the urban regeneration project in all three projects, and a key expectation of the local community, is the creation of new jobs. According to internet sources, 35,000 workplaces were planned in the long-term for the King's Cross project. In the Queen Elizabeth Olympic Park, 15,000 permanent jobs were planned (from which around 8000 were specifically for local people). In Nine Elms, 20 000 permanent jobs were planned (of which 20% were for local people), as well as a local employment initiative job scheme and work experience/apprenticeships for students (Figure 8.15).

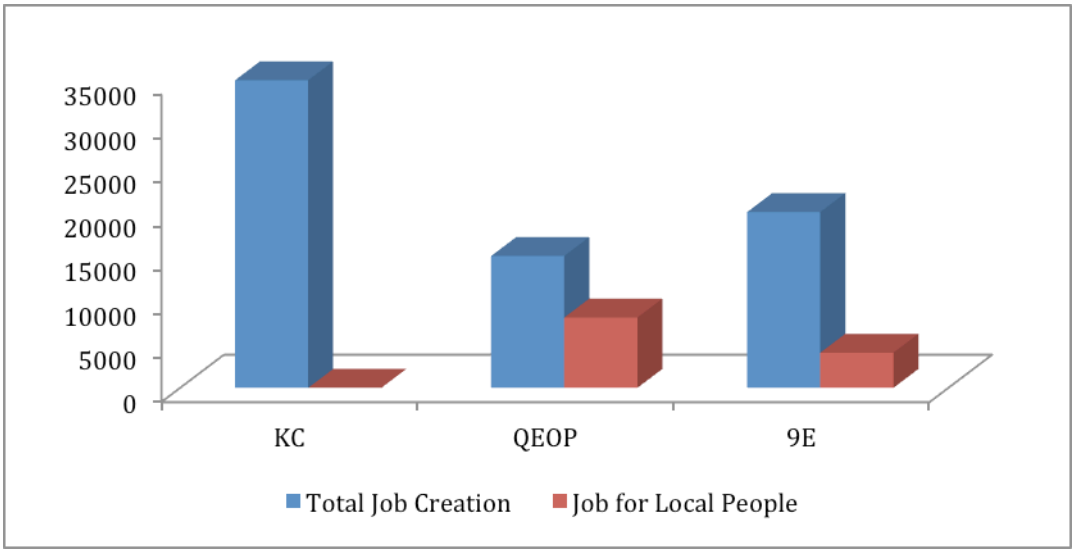


Figure 8.15: Job Creation

Cultural Meaning of Place

East London has a rich cultural identity and there is a particular focal point of cultural activity in Stratford and Hackney. The local community was encouraged to come to the Park. The Park also attracted some large cultural institutions, including the London Victoria Albert Museum, which recognised the creativity, energy and cultural diversity of East London.

In the Kings Cross Project, a major event explaining the history of the area was organised for the local community free of charge. In Nine Elms, different facilities were installed, such as a cinema screen and a pleasure garden. A booklet was published, outlining planned projects and cultural activities. There is also a major focus on horticulture, a farmer's market and a flower market. Some art galleries have now moved to Nine Elms. As can be seen, in all three projects, the cultural segment was considered very important.

Project Design Considerations

Effective design is crucial for a successful urban development project. Literature suggests that the design aspect need not involve a famous architect but should create a place where people like to play, work and study (Jenks & Dempsey, 2005). The King's Cross development project design was led by the idea of the public realm as a place whose spaces matter the most to local people. This project should contribute to the goal that London becomes a sustainable city. Of course, developers also wanted to create outstanding buildings with high quality architecture. Careful consideration was given to the cultural integrity of the area. In the Queen Elizabeth Olympic Park project, a famous and expensive architect was hired to build the aquatic centre with a view to sustainability. In the Nine Elms project it was also ensured that developers recruited a quality architect. The idea was to optimize the density with as much open space as possible.

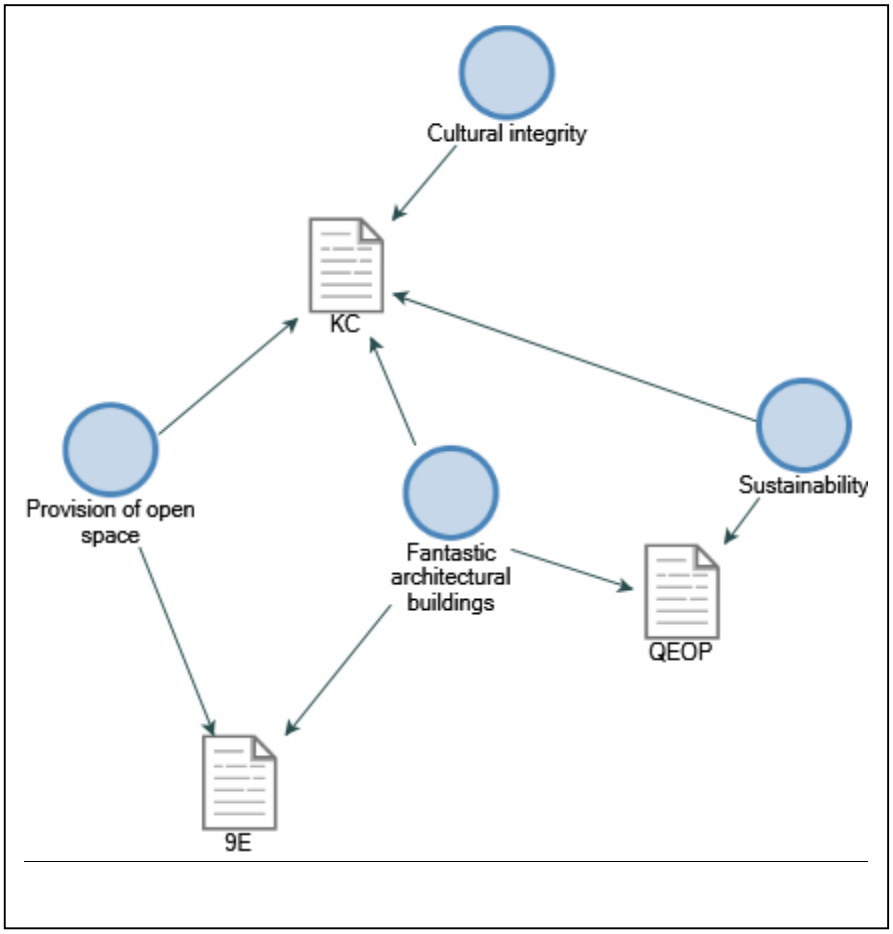


Figure 8.16: Project Design Consideration

As illustrated in figure 8.16 the three projects have aimed to achieve fantastic architectural buildings. The next design considerations all projects possessed was regarding the sustainability and the provision of open space. (Figure 8.17)

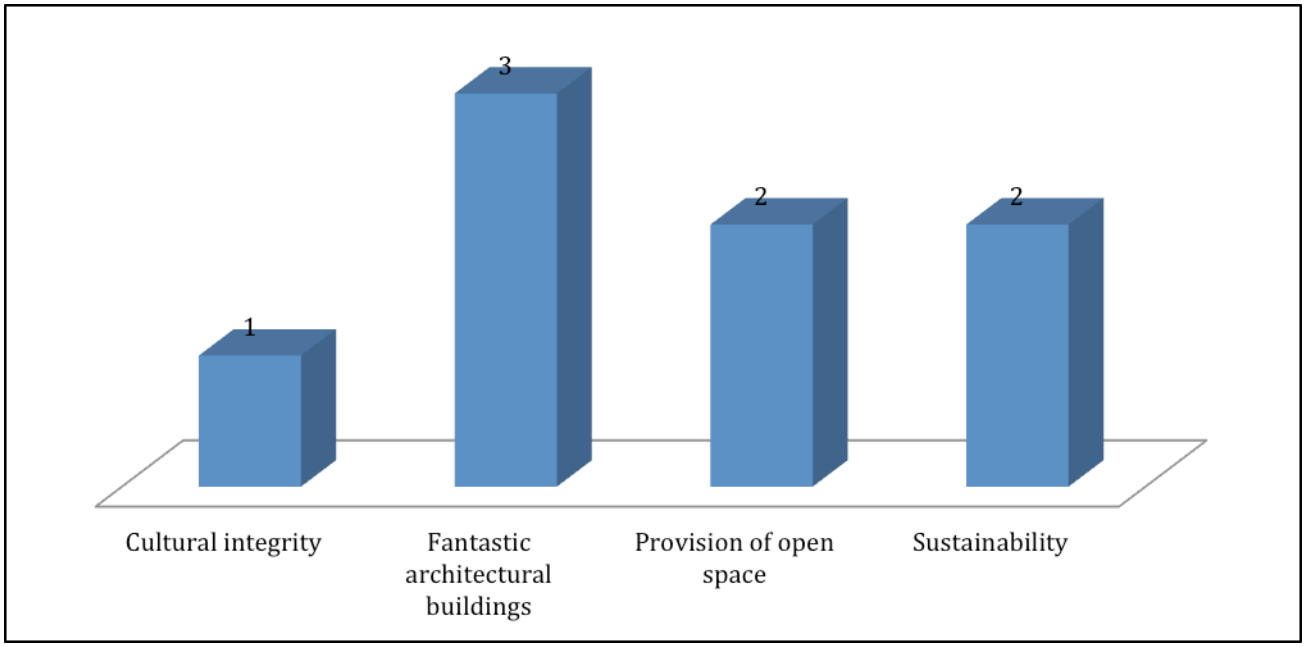


Figure 8.17: Project Design Consideration

Building Efficiency and Sustainability

Energy efficient buildings are vital to sustainability. Energy efficiency saves money and creates jobs, and is a core component of sustainability. Interviewees involved in the King's Cross project confirmed that the last four office buildings were BREEAM rated. As a part of sustainability agenda in the Queen Elizabeth Olympic Park, a building used during the Olympics as a reporters' hub was converted into a business centre, and the former handball stadium was converted to a multi-purpose sport centre for the local population. In the Nine Elms project, each development has to demonstrate building efficiency and sustainability through planning. A public space designed as a park formed part of the general planning framework. Codes for sustainable homes with design guides and BREEAM certificates were met. There is also a district-heating network which connects all developments associated with project (Figure 8.18).

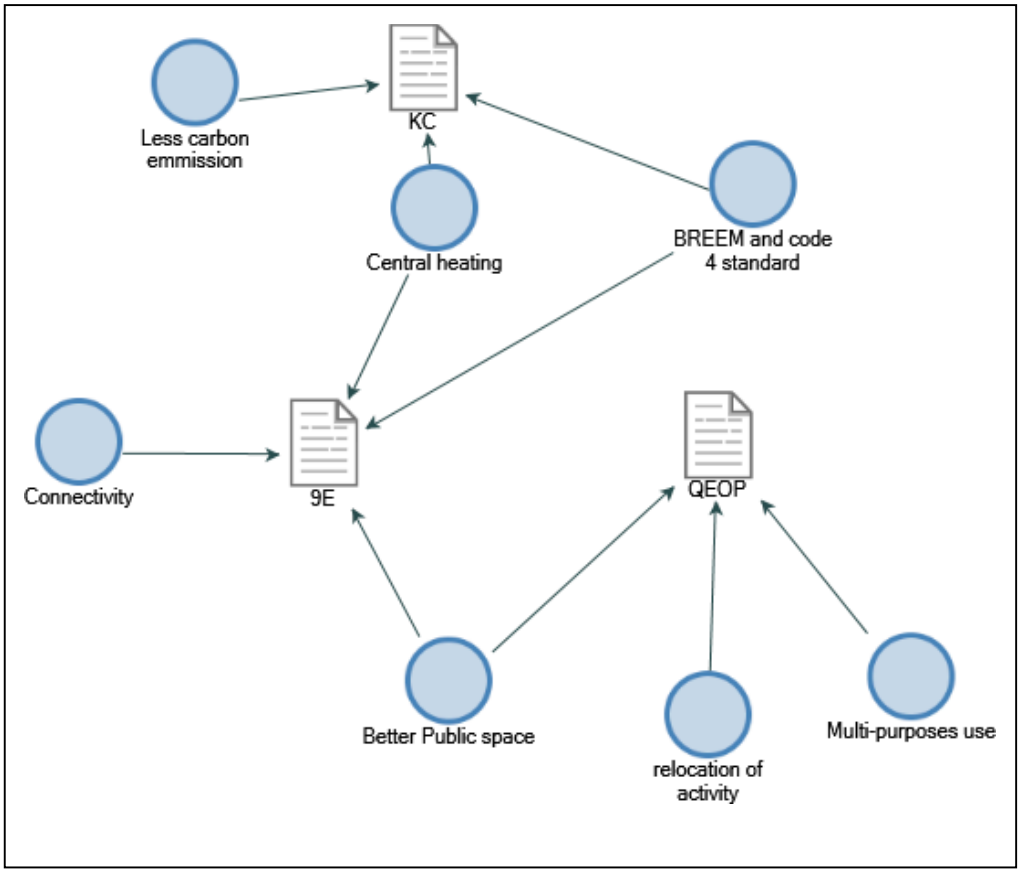


Figure 8.18: Building Efficiency

Urban Realm

Although no city can be fully sustainable on its own, what it can do is to establish an enabling environment that encourages sustainability (Rydin, 2003). The literature also recognises the importance of the effective use of public space in creating a thriving and sustainable urban environment.

Public real estate covers a very big part of the King's Cross area. Around 40% of the 67 acres are in the public realm, which makes it especially important to develop green infra-structure.

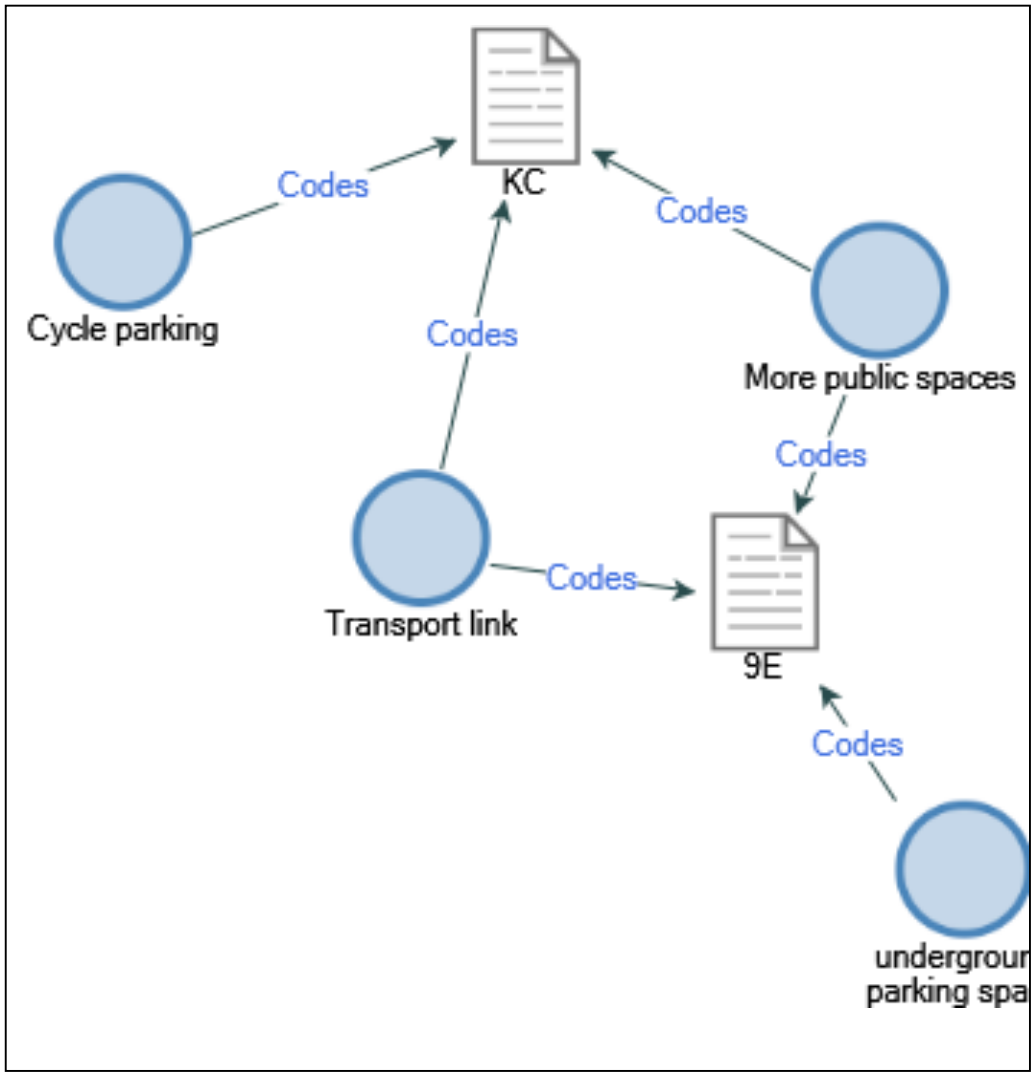


Figure 8.19: Urban Realm

There are no car parking spaces on the site, but there are ample spaces for bicycles, and the different parts of the site are linked by regular bus services. In the Nine Elms project all parking spaces are underground. The majority of

open spaces are public spaces. Although the area was previously isolated from the city this project is intended to connect the area with the wider city. One of the long lasting legacies of the London Olympics has been the extensive infra-structure development, creating a multi-modal station at Stratford, connecting the area to London, the suburbs and the national transport system (Figure 8.19).

Project Funding Model

Financial viability is also a necessary condition for project success. It has emerged from the literature that having secure funding for the project is very critical, since it ensures possible contingencies are in place to ensure funds can be released in such a way that cash flow difficulties do not arise. The Argent Group and other shareholders had obtained the initial money for the King's Cross project from the BT pension fund. A part of the funding came from the Argent Group's own resources, from bank loans or from selling assets. Landowners also invested in the partnership. Individual projects were funded through bank finance on a project-to-project basis. If the project was residential, the money was paid back to the bank after it was sold. No public money was involved, except the grant for affordable housing.

In the Queen Elizabeth Olympic Park project, the majority of money was public money from the Olympic Games fund. Core funding for this project was through the Mayor of London. In the Nine Elms project, Section 106 funding scheme was used as well as the community infrastructure levy. Additionally, the tax increment financing scheme was also used to secure the Nortern Line extension. Units were pre-sold in order to secure the funding for the second stage of construction. The landowners paid for funding of the planning works. (Figure 8.20)

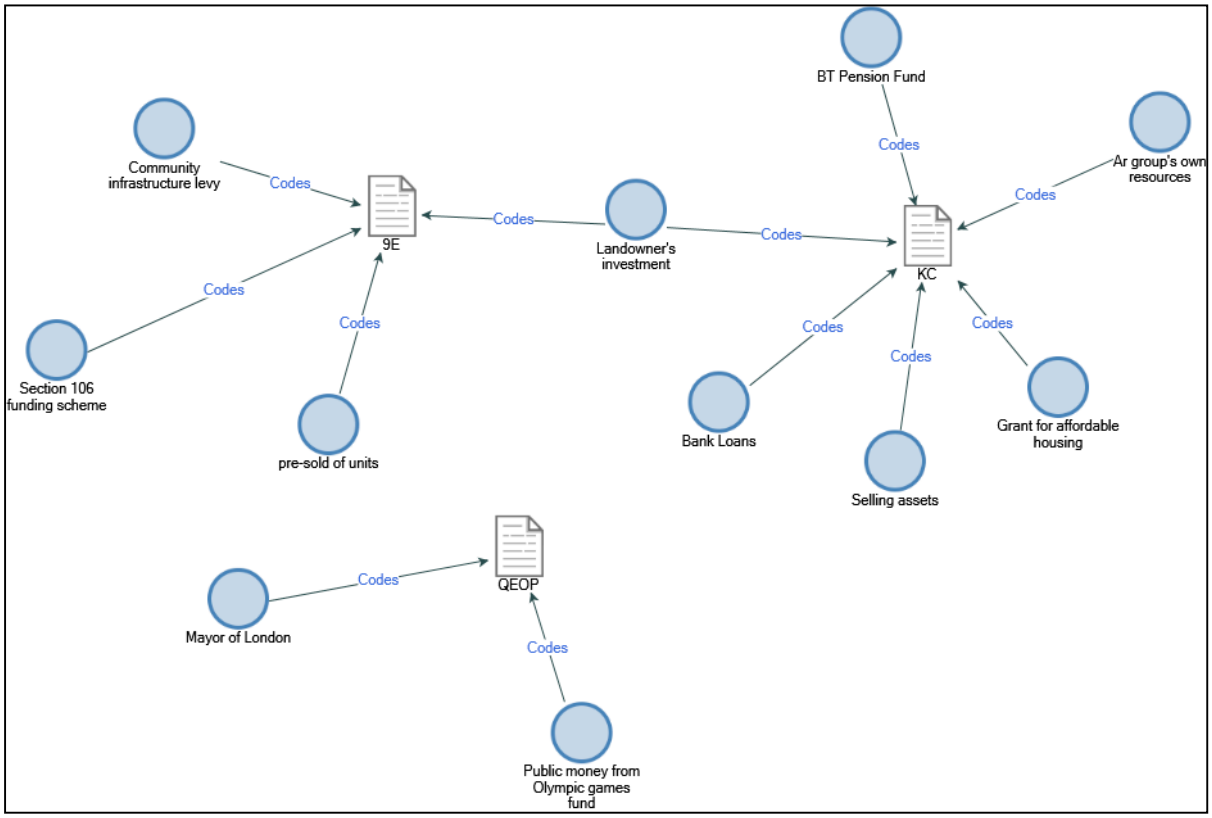


Figure 8.20: Project Funding Model

Verification of the Project Milestones and Key Performance Indicators

Delivering a project on time and on budget is not an adequate measure of project success but the key matter is whether the project delivers value to the stakeholders. How project milestones are verified and what the key performance indicators (KPIs) are, are both factors that have an impact on the success of the project. In the King's Cross project, one key performance indicator is simply signing the lease. Interviewees indicate that in this business if they are late, they will be penalised. The tangible milestone is how many buildings are constructed, completed and occupied.

In the Queen Elizabeth Olympic Park project, the London Legacy Development Corporation reports to the board. The Mayor, who is the chairman of the board, is especially interested in the various key performance indicators.

In the Nine Elms project, the milestones are verified through signing the contract with unit buyers, and through confirmation by the bank that the contract is signed. Different key performance indicators are used. The employment charter is published quarterly with the results on every key

performance indicator (for example, how many school visits or work placements are organized).

Key Project Risks and the Way they are managed

A key requirement for project success is the identification and management of risks and risk mitigation. Interviewees involved in the King's Cross project indicate that there is a delivery risk in terms of actually creating the infra-structure and getting the building built. It is important to have a good construction team so that one part of that risk is transferred to them. There is also a market risk. In the King's Cross project, a mixed scheme was used with different ways of accelerating and slowing down the process at different points. Their major risk was related to maintaining the cash flow. This required strict and regular monitoring on a weekly and monthly basis.

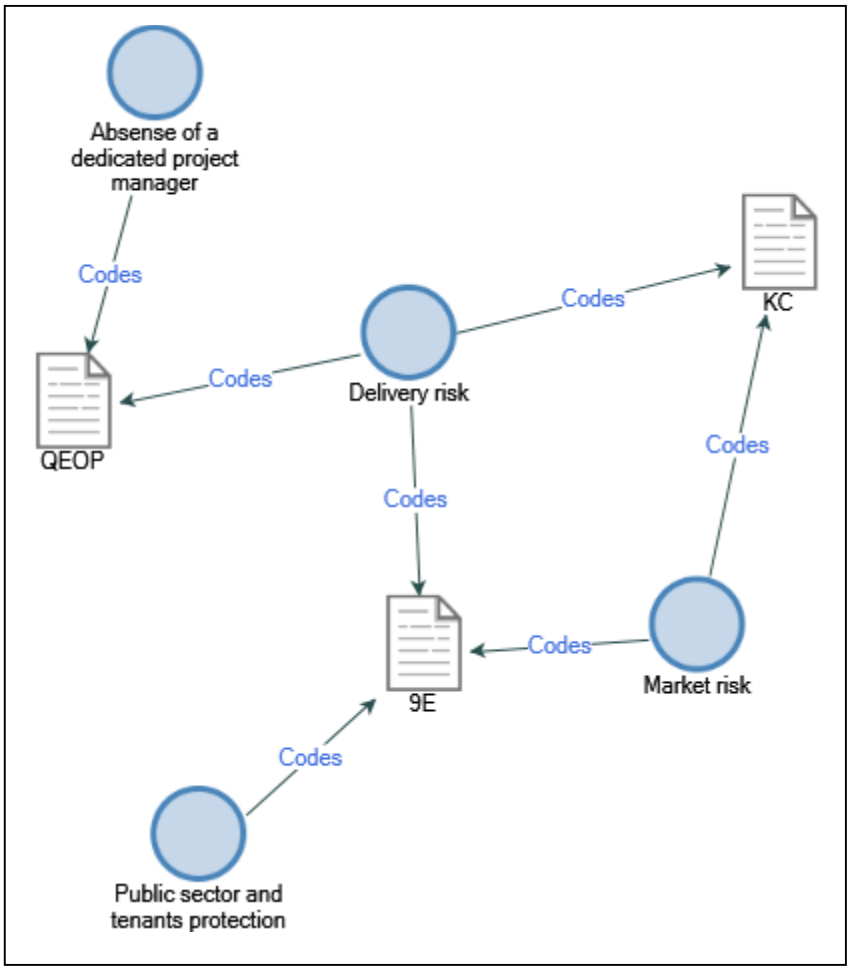


Figure 8.21: Project Risks

Those involved in the Queen Elizabeth Olympic Park project highlight the fact that it is important to have a dedicated project manager to ensure on-time delivery. In the Nine Elms project, the biggest risk was related to completion because of the long-term delivery commitment of the people involved. It was important to protect the public sector from the construction costs and changes in values, and, also, not to lose tenants. For the Nine Elms development one of the main concerns was about what would happen with the profile of the local area and who would buy the new plots. These risks were managed through various strategies. For example, in the planning phase there were five different development scenarios. Special attention was paid to ensuring that infra-structure fits with the design. For example, when the market in the UK was weak, the plots were advertised overseas.

Business Model and Payback Structure

Business models and payback structures should be designed to optimise the costs of finance for projects (Umble, Haft, & Umble, 2003). Interviewees involved in the King's Cross project indicate that there was not a clear business model, nor a payback structure for the project, because the business model was intended to be dynamic and, therefore, constantly updated and opportunistic. The rationale was that being confined to a single model would limit opportunities. In the Queen Elizabeth Olympic Park project, core funding was public, but partnerships with private developers were formed to generate income. Some of this money was used in managing the Park, while some of it was paid back to the government for the National Lottery. In the Nine Elms project, developers had their own specific business model covering the next 20-30 years.

Investors' Priorities

For the success of a MURP, it is important that the investors' priorities are clear and aligned with the project objectives. In all three case studies, investors had long-term priorities (20-30 years). Probably the most important one was the impact on the urban realm. The second was financial; all investors would like to receive an appropriate return on their funds. In the Queen Elizabeth Olympic Park project, the Mayor of London's interest was in securing the

legacy of the Olympic Games. Another priority was attracting business to improve the socio-economic level of local people in East London because it is lower than the rest of London. In the Nine Elms project, the local authorities' priority was making sure that local people would benefit in terms of jobs. Another priority was to create more public space. Investors from the private sector also wanted to see a return on their investment. (Figure 8.22)

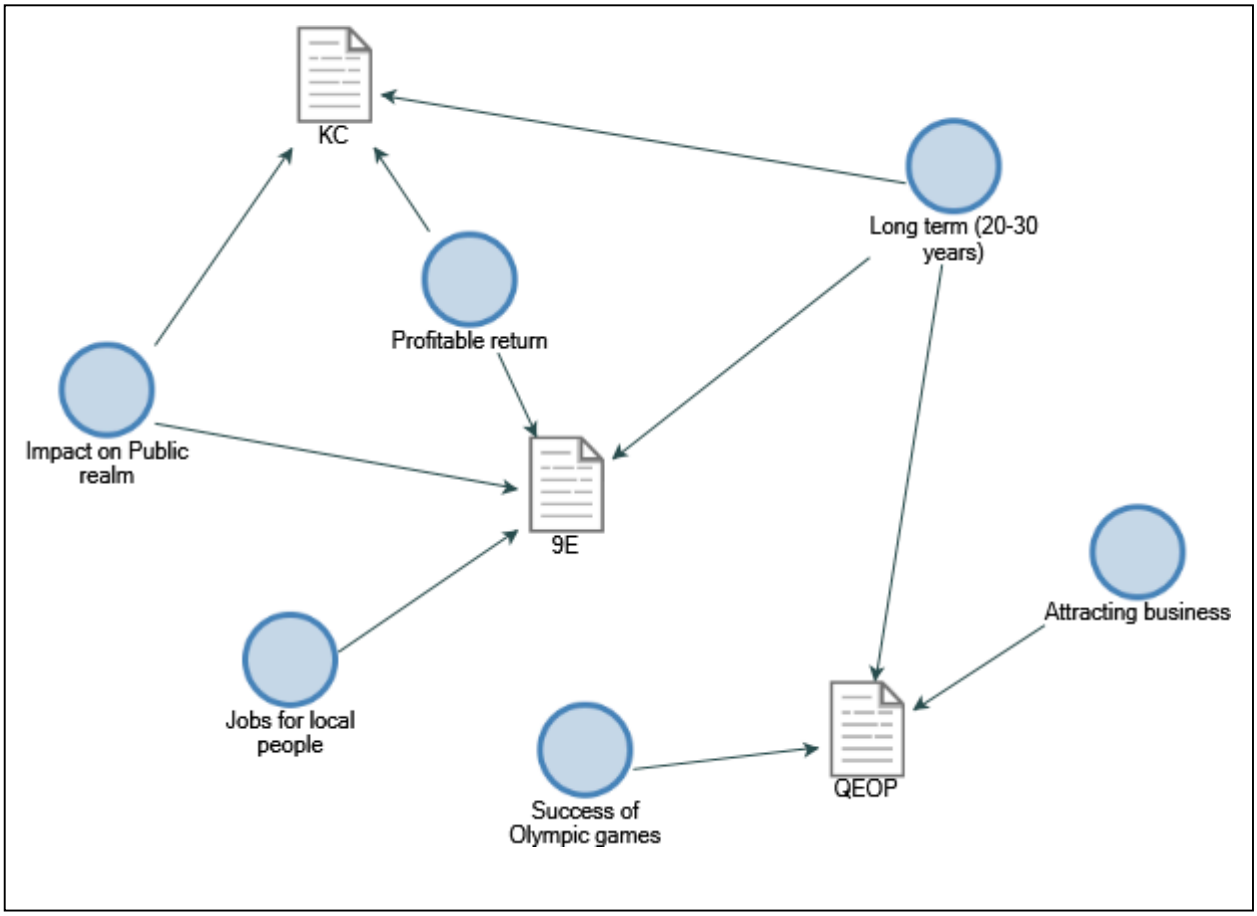


Figure 8.22: Investors' Priority

8.3 MURPs Model as a Valid Evaluation Framework

Section 8.1 investigated and evaluated three case studies within the MURP evaluation framework. The generated MURP evaluation framework, which is the outcome of this research, has been investigated for plausibility against three case studies. The case studies support and validate the three MURP evaluation framework pillars of Smart Institutions, quality projects and sustainable funding. The purpose of this section is to validate the MURPs as an evaluation framework for mega-urban regeneration projects. This is achieved by seeking the views of key stakeholders on each regeneration, academics as well as the independent experts from outside the case studies. 32 interviews were conducted in which each respondent was asked to express their views about the application of the proposed model and its relevance to evaluation of Smart Institutions, Quality Projects and Innovative Funding of such mega projects.

Figure 8.23 illustrates the word cloud based on the words frequencies in the transcription of all 32 interviews. The words Project, Development, London, local, people, money and public all occur more frequently than other words.

Figure 8.23: Word Cloud Generated by NVIVO Software

As shown in figure 8.24, interviewees were asked to rate the importance of different factors on the success of mega-urban regeneration projects on a five-point scale (1 - not important, 3 - moderate, 5 - very important). All factors were more often rated with marks 4 or 5 than with 1 or 2; this indicates that all listed factors were considered as important.

According to the interviewees, the most important factor was a clear vision of the project. All interviewees considered this factor as either very important (28 people) or important (four). Another highly marked factor was public realm enhancement, which 21 persons considered very important. This is not a great surprise, since interviewees indicated that the impact on the urban realm was probably the most important long-term priority of the investors in mega-urban regeneration projects.

Scientific based investigation was rated with the lowest average marks, although the baseline investigation was conducted in all three case studies. Only three respondents considered the investigation as not important at all for the success of the project. However, on average, this factor was still considered, at least, moderately important and 19 interviewees rated it with mark 3. A clear articulation of Key Performance Indicators (milestones) was another objective that had an average mark close to 3 (15 interviewees rated it with that mark). Although interviewees saw these two factors as relatively important, they were probably aware of the uncertainties that usually exist in the early stages of the projects. For example, interviewees involved in the King's Cross project indicated that business models in projects of this size have to be dynamic and constantly updated. This is the reason why initial assumptions often need to be changed or abandoned.

All other factors, namely, fostering the creative industries, the physical efficiency of the project, tight governance arrangements, articulation of local identity preservation/enhancement, tight partnership management, strong risk management excellence in project design, authentic community consultation, contribution to strategic goals, a clear and viable payback model and strong stakeholders co-ordination all had an average mark around 4.

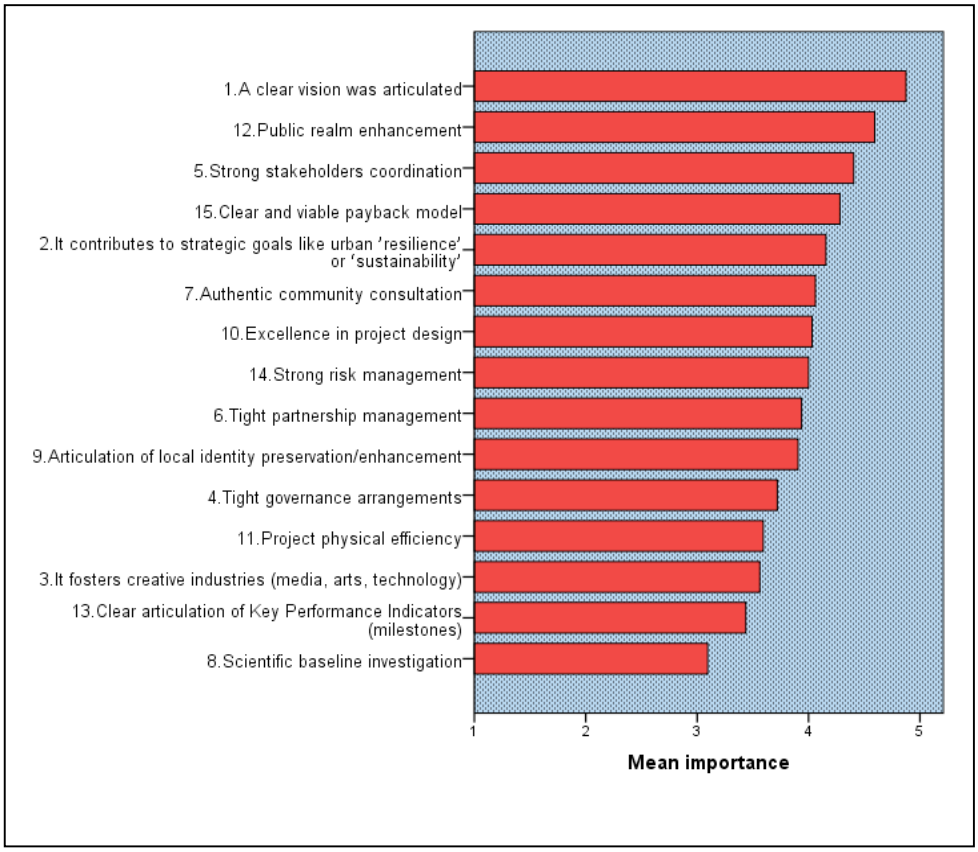


Figure 8.24: Mean Importance of Different Factors on the Success of Mega-urban Regeneration Projects

The conclusion would be that the proposed criteria are valid, since all average marks were fairly high. According to the sample of interviewees, all criteria were at least moderately important, which is evidence of the model's validity. The researcher then scored each case study project against aspects of the MURP institutional, project and funding domains using a five-point Likert scale.

	Smart Institution (foresight)			Smart Institution (institution)			Quality Project (locales)			Quality project (project)			Innovative Funding		
Attributes	intelligence	resilience	creativity	governance	scale	Fit	community	Baseline	Genius loci	design	Efficiency	Spatial justice	collaboration	De-risking	payback
KC	**5**	**5**	**5**	**5**	**5**	**5**	**3**	**5**	**5**	**5**	**5**	**5**	**4**	**4**	**4**
9Elms	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**	**4**	**4**
QEOP	**3**	**4**	**5**	**5**	**5**	**5**	**3**	**5**	**4**	**5**	**4**	**5**	**4**	**5**	**4**

Table 8. 3: Evaluation of the MURP Framework

As illustrated in Table 8.3, the Kings Cross project marked 5 in most criteria except 4 for the innovative funding and 3 for the community. The unclear perspective regarding previous community and residents at KC since before the project began is identified as the weakness of this MURP. However, compared with the two other studied MURPs Kings Cross was recognised more successful with the mode mark of 5.

Queen Elizabeth Olympic Park marked 3 for the project intelligence or foresight, since, according to the respondents' opinion, a project within these parameters could have achieved a lot more. And again the issue regarding the previous residents of the area before the redevelopment happened remained unexplained. Apparently this project has achieved some success partly due to its high national and international importance and the extent of government support.

Nine Elms is a more complicated MURP compared with the other two; this is due, mainly, because of the public-private partnership it involved which required a great deal of co-operation and a facility to move things forward. Regarding the quality of project it has aimed to ensure high quality in terms of design and the sustainability aspect has been met. The use of TIF as an innovative funding method matching to other funding tools makes this project distinctive based on the MURP evaluation framework.

The evaluation of these three mega-projects based on the MURP framework revealed that the success of these projects is based on key factors, including having a clear and long term strategy and vision, the importance of having an appropriate funding and all risks properly managed, the significance of governance and accountability and role of the public realm. A project has achieved succes only until it has regenerated after an elapse of time and local people feel included in the area.

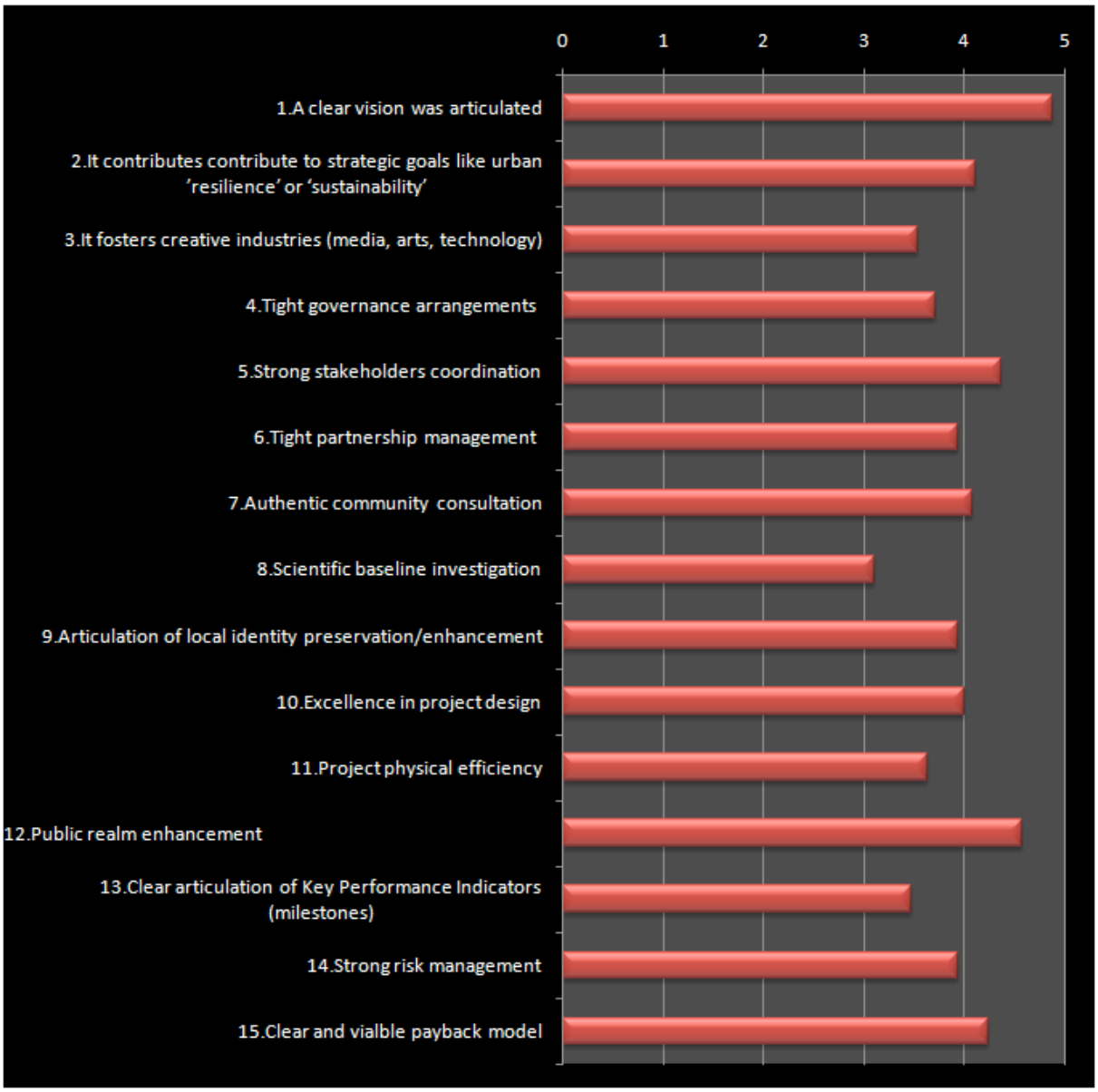


Figure 8.25, Model Validation Score

Figure 8.25 above illustrates the fact that the criteria used in the MURP model or framework are valid for the evaluation of mega-urban regeneration projects. Application of the MURP evaluation framework to the three case studies also points to critical factors for a successful MURP (Table 8.3). These include social payback, place making (place experience), timing (hitting the market at the right time), market confidence, and resilience and survival of the project (whether, after passage of time, the project is turned into a wasteland or becomes a place which people regularly visit), having flexibility in vision and a plan that allows sufficient differences and potential land uses or flexibility in approach. This implies having the flexibility to change the approach in case

something does not work. This flexibility comes through engagement with partners and working together with the council, having the key consultants to support and understand the best approach. Long term vision and real clarity upfront is also seen as crucial, as short termism often endangers the successful outcome of such strategic projects. The other factor emerging from the application of MURP is the ability of statutory office to respond to change and to be more aligned with private stakeholders.

8.4 Conclusion

This chapter has provided an analysis of the application of the MURP evaluation framework to three case studies of Mega-Urban Regeneration projects in London. The research evidence clearly validates the proposed model as an effective tool in evaluating MURPs. Evidence from the case studies demonstrates the complexity of Mega-Urban Regeneration projects and the changing nature of funding mechanisms, especially in the aftermath of the GFC in 2007. The MURP framework has proven an effective tool in evaluating such projects, as it enables close scrutiny of different elements of the core criteria, namely Smart Institutions, project quality and innovative funding. Using the MURP model or framework and testing it in Kings Cross, Queen Elizabeth Olympic Park and Nine Elms projects also revealed that the success of these projects is based on key factors, including having a clear and long term strategy and vision, the importance of funding mechanism, the significance of governance and accountability and role of the public realm.

9|Conclusion

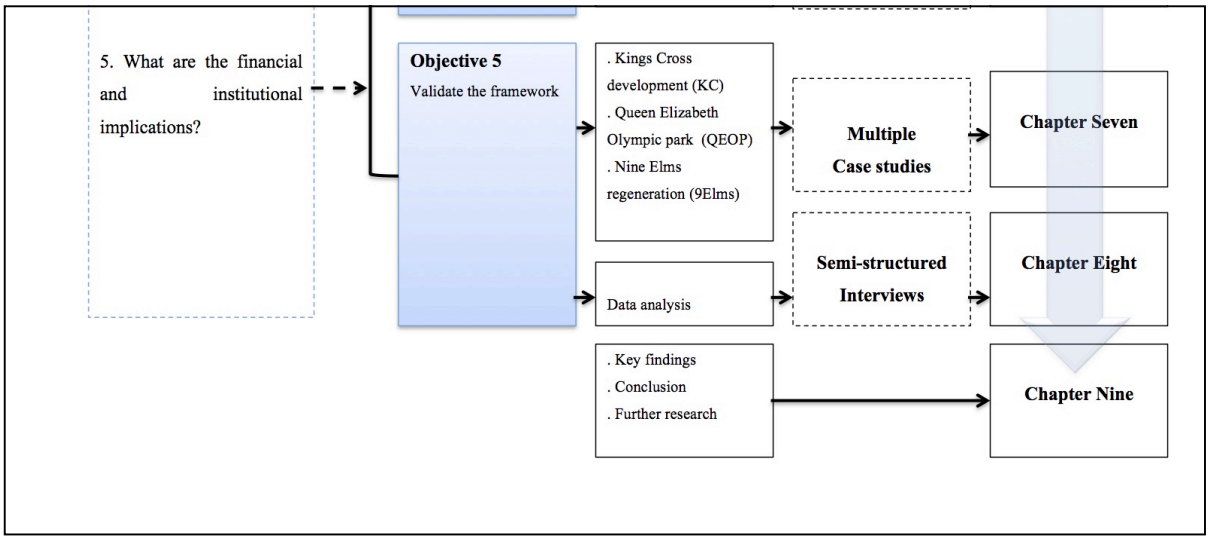


Figure 9.1: Thesis Structure (Corresponding Objective, Methodology and Chapter Structure)

Chapter 9: Conclusion

9.1 Introduction

The final chapter of the thesis draws together the major findings and conclusions of this research. The chapter is structured around three sections. Section 9.2 discusses the main findings of the research in addressing the aim and objectives of the research. Based on the knowledge based accumulated as a result of the research section 9.3 draws together conclusion of the study. Section 9.4 outlines the key contributions of the research in terms of its conceptual and methodological policy and practice. Section 9.5 discusses the research limitations and the final section identifies further areas of research.

9.2 Key Findings

The overall aim of this research was to develop and validate a new framework to evaluate mega-urban regeneration projects. In order to address the question, five objectives were postulated: firstly, to explore the nexus between MURP, urban transformation and globalization; secondly, to identify the characteristics of sustainable mega-urban regeneration projects; thirdly, to investigate and analyse existing sustainable urban regeneration models; fourthly, to develop a framework to evaluate mega-urban regeneration projects; and fifthly, to validate the evaluation framework.

The proceeding sections draw upon the core findings of this research that underpin each of these five objectives.

9.2.1 To Explore the Nexus between MURP, Urban Transformation and Globalisation

The first key finding relating to objective one of the research confirmed the link in the literature between globalisation and urban development. Mega-urban regeneration projects are a key conduit for globalisation to influence settlement forms and functions. The importance of cities in the past was largely concerned with their geographical location – the proximity of a port or river, or a natural resource, for example. In antiquity, religious and public monuments played important symbolic roles in reinforcing the power of cities like Rome

and Athens and the provision of water and sanitation was important. However, in the era of globalisation, the excellence of a city's urban quality has become a far more significant factor. Some consider a key task for urban planners today is to ensure the high quality of their city, as well as attractive branding and targeted marketing and to ensure that they secure sufficient investment to build a sound economic future. Whilst some criticize an approach which tends to glamourize large scale construction projects at the expense of smaller scale and needs-based social interventions, MURPs are one of the most visible manifestations of this new approach to city management, to the extent that they seem intrinsically linked to globalisation. For this reason, some key thinkers in the field encourage the creation of MURPs as part of a balanced urban regeneration strategy. Alongside the production of MURPs are related neo-liberal urban strategies such as city branding and marketing, and flagship projects. Urban regeneration policy in the UK, which for the past three decades has been strongly influenced by neo-liberal economics, has brought about massive changes in the UK's institutions and the handling of urban regeneration. This research analysed urban regeneration policies in the UK and in other countries, to establish a link between globalisation and urban development, with mega-urban regeneration projects as a key instrument for the implementation of such policies. Since we are in an era where increasing expectations are placed on government finances and public service provision the research also investigated new financial model, such as TIF and DIBDs used in the USA, as mechanisms to unblock investment and raise finance for MURPs in the UK and elsewhere.

9.2.2 Identify the Characteristics of Sustainable Mega-urban Regeneration Projects

For the second research objective, the thesis reviewed the existing literature of urban regeneration to underpin Objective Two. While a growing body of research attempts to examine what urban renewal sustainability means in different contexts, all approaches to sustainability tend to accept that regeneration has three strands: social, economic, and environmental. Each of these strands must be carefully considered when planning for urban renewal.

Reviewing the literature revealed sustainable urban regeneration projects are aimed at producing good-quality housing, improving public living standards, promotes the rehabilitation of dilapidated buildings and aims to make better use of a city's existing building stock and land resources. Urban regeneration projects are greatly influenced by the relationship between the different stakeholders and the characteristics of different partnership modes, as well as the power, mechanism, and operation of different agents. Therefore, the findings of this study suggest that the performance evaluation of construction projects is shifting from the conventional measures of cost, time, and quality towards a combination of both quantitative and qualitative measures.

The review of the literature suggests that there is a consensus that project success can be defined and measured where projects meet a combination of budgetary, timetable and technical specifications. Meeting stakeholders' expectations and needs and attaining the project business goals are also becoming more important as the expansion of success measurement encompasses overall project success. However, the social and economic aspects of the project have attracted less attention in the past.

The major outcome of the research was that it would be impossible to produce a single universal checklist that would measure the success of all such projects. Success criteria will inevitably differ depending on context – the size, the complexity or even the uniqueness of the project, for example.

9.2.3 Investigate and Analyse Existing Sustainable Urban Regeneration Evaluation Models

The third research objective was to review current evaluation models. The research identified that there is a gap in the body of knowledge about a robust evaluation framework for Mega-Urban Regeneration Projects. Hence the aim of this research is to develop and validate a new framework to evaluate MURPs.

Reviewing the literature explains that while there is no universal or standard definition for the term "Mega-Urban Regeneration Projects", these projects are defined as programmes that integrate very large, mixed used urban regeneration developments, and are intended to attract multi-national

businesses into the planning process. The research further explored urban regeneration and development policies in the UK. It looked at how the implementation of neo-liberal socio-economic policies led to critical shifts in the way that urban planning in the UK has been organised.

The analysis of different evaluation models confirms that there is a gap in the knowledge for a robust evaluation model for MURPs. Hence the aim of this thesis is to propose a framework to evaluate MURPs.

9.2.4 Develop a Framework to Evaluate Mega-urban Regeneration Projects

The thesis main purpose was to generate and validate a MURP conceptual framework, with institutional, project and innovative funding components. The draft framework was developed after a systematic literature review as well as by examining the background of urban regeneration in the UK. The plausibility of the framework was tested by investigating urban regeneration projects in the UK, supplemented by insights from overseas examples and underpinned by a series of in-depth interviews with key MURP players involved in three London MURPs. The interviews probed the extent to which the draft framework captured all complexities of project evaluation. Stakeholder's feedback helped to refine the draft MURP tool kit. The outcome of all this was the final validated MURP evaluation framework.

In order to develop a framework to evaluate mega-urban regeneration projects, an extensive review of the literature was undertaken, supplemented by a series of preliminary interviews, and from this work, the Mega-Urban Regeneration evaluation model was generated. The mainstream urban regeneration literature informed draft framework genesis and identified three pillars: a Smart Institution, a quality project and innovative funding models. Having generated the draft MURP framework, its plausibility was investigated using secondary data, suite visits and, finally, stakeholder interviews. The initial secondary data came from web sites, e-Word of Mouth (blogs and social media). Site visits and project archival documentation provided further inputs to evaluate the framework. In addition, a site visit to Utrecht in the Netherlands provided an appropriate case to test the proposed model.

The MURP framework, therefore, provides a workable tool for evaluating MURPs. It examines both procedures and outcomes to provide a rounded picture of what makes a MURP successful. It recognizes that there is more to urban regeneration than engineering efficiency to ensure that the project is delivered on time, on budget and to the require specifications. Instead, a successful MURP builds on local roots and creates a distinctive aesthetic identity to help complement and promote the branding of the wider city. They can be strengthened by improving their understanding of the competing interests of their stakeholders and, hence, of their administrative complexity.

Transformational aspirations for a MURP include enhancement of the urban realm, balancing spatial equity with a careful consideration of the legal and procedural process, encouraging self-determination, entrepreneurship and financial viability.

The credibility of partnerships is key to keeping projects smart and legitimate, as also is ex-anti modelling of urban transformational outcomes and functional impacts. Regeneration oversight should therefore extend to the monitoring of partnership outcomes, of construction milestones, local transformative outcomes and the expected eventual community outcomes. The transformational outcomes should include factors such as the environment, affordability and consideration of heritage and cultural integrity. Properly managed, this should eventually result in local inward investment, with a corresponding increase in start-ups and job creation, with greatly improved infra-structure and living standards. Indicators of disease, poverty and decline should all begin to decline. The regenerated community is thus more resilient, healthier and more prosperous, thus addressing three of the key challenges that the MURP was designed to overcome.

9.2.5 Validate the Framework

A key concern of the research was to guarantee the viability and accuracy of the data employed in the empirical research underpinned in Objectives Five. In order to validate the proposed evaluation framework, three case studies were selected in different areas of London: Kings Cross project, Nine Elms project and the Queen Elizabeth Olympic Park development. Key actors were

identified within both the public and private sectors and the selected projects were investigated as case studies during a specific period of time. London was selected as the location of this research due to the city's importance as a premier global city and the fact that London has become the centre for investment in financial and property assets. UK is one of the largest markets in the world for fund management, and has remained Europe's leading centre for fund management. Despite London's abundance of wealth, the city suffers from serious shortages of housing (especially affordable housing), as well as from urban deprivation and unemployment. This has been the result of cumulative decades of deprivation, resulting in a high rate of crime in parts of the city that have a legacy of unused industrial, contaminated lands. To address such problems, government policy has tended to focus on the regeneration of the inner cities and on deprived low-density derelict areas. Of the ten most deprived areas in the UK, three are located in London. The case studies investigated in this study were identified as having the pre-requisite characteristics of sustainable mega-urban regeneration.

Core findings of this research underpinning Objective Five of the thesis set out to validate, or refute, the proposed framework through interviews with key stakeholders. The findings of the interviews identified key attributes for the screening model as robust planning, quality project, public realm and a dynamic constantly up-dated business model. For robust planning, respondents considered a clear project vision the most important factor. Interviewees rated mega-project vision either 'very important' (28) or at least 'important' (4 persons). Respondents considered public realm enhancement quality project the second most significant mega-project success factor with 21 respondents rating it as 'very important'. Surprisingly, despite the fact that all three projects conducted baseline investigations, it was not a highly rated aspect of project quality. Three respondents even dismissed the activity but, on average, most considered it at least 'moderately important' and 19 interviewees rated it with mark 3. Surprisingly, in terms of project management, clear articulation of Key Performance Indicators (milestones) scored an average mark close to 3 (15). Possibly interviewees, aware of the uncertainties that usually exist in the early stages of the projects, were reluctant to let ill-considered performance matrices bog projects down. Rather, KC interviewees stressed the need for

dynamic and constantly updated business models. Respondents considered all other project management facets, as articulated in the draft framework, 'important'. Respondents rated other specific elements of robust planning (strategic goals, design excellence, fostering creative industries, heritage preservation or articulating local identity) similarly. For institutions, tight governance and partnership management were important. For project management important considerations were stakeholder coordination, efficiency, risk management and authentic community consultation. For funding, respondents looked for a clear and viable payback model.

The research used an explanatory framework with five dimensions (robust planning, smart institutions, quality project, project management and sustainable funding) to assess three key London urban mega-projects at Kings Cross, Queen Elizabeth Olympic Park and Nine Elms. The findings suggest that the most important factor for mega-project success is a clear vision with credible public realm enhancement, rooted in urban design and place understanding.

9.3 Key Conclusions

Based on the findings of the research the key conclusions of the study can be summarized as:

Mega-Urban Regeneration Projects cost over 1 billion US Dollars each, are financed and initiated mainly through public-private partnerships and are used as a planning tool and a magnet for attracting inward investment. They sustain regional competitiveness and economic prosperity by fostering the well-being of a city.

Sustainable Mega-Urban Regeneration Projects build on local roots and aesthetic identity but are complex with multiple contested goals and high information costs.

The MURP framework provides a useful tool to evaluate them. It involves both procedural and balanced multi-faceted teleological considerations (outcomes and impacts).

Betterment ideals are balanced by practical awareness of competing foci and, hence, administrative complexity.

MURP transformational aspirations for urban realm enhancement or spatial equity must be balanced by a sober consideration of the legal and planning process, impulses to self-determination, entrepreneurship and, not least, financial viability.

Policy flux and political vicissitudes, site and engineering challenges, blight or social deprivation all complicate public realm transformation projects.

Unless contained by independent scientific assessment and conflict resolution mechanisms, stakeholder wrangling can delay or stop projects. On the other hand, autocratic project delivery without due reflection, tight oversight, or authentic local empowerment can bequeath 'white elephants,' urban dysfunction, debt, and the poison chalice of civic corruption.

Having flexiblity is very important to allow the market to move in a life of the project; this can be achieved by making sure the plan and vision allows enough differences and potential land uses.

9.4 Contribution to Knowledge

9.4.1 Theoretical /conceptual Contribution

This research has reviewed key urban regeneration theories and concepts and developed a conceptual framework (MURP) for Evaluation of Mega-Urban Regeneration Projects. This multi-criteria framework provides an original and useful tool to screen them and adds to the body of knowledge on urban regeneration.

9.4.2 Methodological Contribution

This research makes an original contribution to knowledge in terms of methodology of investigating mega-urban regeneration projects. The methodological contribution is the adapted sequential explanatory mixed research methodology and involved web-based research, case studies and interviews.

9.4.3 Policy Contribution

The research generated insights for urban regeneration policy and interventions with regard to their effectiveness in tackling urban decay and deprivation. Whilst acknowledging that formal planning and evaluation procedures vary by jurisdiction, the thesis provides an over-arching idealised strategic evaluation toolkit. The validated MURP framework involves procedural (e.g. community consultation) and balanced multi-faceted teleological considerations in terms of outcomes and impacts. More than its multi-criteria considerations though, the MURP toolkit helps catalyse debate and further analysis. It invokes dialogue with diverse locals and experts, discussion with partners, process observation and audit of outputs, outcomes, and impacts. The second policy contribution was to alert policy makers and practitioners to the limitations of the model and the need for a case by case context evaluation with the need for meta-cognition of risks and continuous policy learning.

9.4.4 Practical Contribution

The research identified the administrative complexity and practical awareness of competing foci of MURPs. It made useful practical contributions to the understanding, limitations and effective implementation of Mega-Urban Regeneration Projects. The MURP framework helps to evaluate them, not only in the UK but also elsewhere, with the ability to take into consideration local and national project characteristics and nuances. However, the thesis also alerts practitioners to the danger of a formulaic approach to project assessment and the need for real understanding of issues on the ground. No model can overcome land use contention and alternative stakeholder viewpoints and an overall judgment of project merit needs meta-cognition, judgment and the need for continuous policy learning, consultation and project adaptation.

9.5 Research Limitations

This research involved a reasonable mix of theoretical and empirical research, and developed a pragmatic triangulated methodology to fine-tune the initial MURP evaluation framework. It has provided research evidence from a

multitude of sources including a comprehensive literature review, case studies, secondary data analysis and face-to-face interviews with key stakeholders involved. Perhaps the most significant limitation of the research is its UK case study bias. Thus, the generalisability for future reference needs to bear this limitation in mind, particularly given the importance of cultural and institutional considerations for appropriate urban transformation projects. The second research limitation was a rather narrow engagement with stakeholders. Future MURP research should extend participatory engagement and consultation to a diversity of site-end users. Arguably also, the MURP framework should weigh each of the project aspects to reflect their importance in overall assessment. Of course, given different stakeholder perspectives and interests, this would involve political considerations.

9.6 Further Research

One major area for further mega-project research it to extend the study beyond the three MURPs to a range of developing countries and regional cities. In addition, future research should involve extending the survey to include a more balanced range of stakeholders, including more local residents in order to establish residents' perception of project vision and success. Whilst the research highlighted the limitations of secondary data for assessment, future investigations could incorporate a systematic review of archival documents (such as transcripts of planning deliberations), digital mapping, or street-view technologies and enhanced site observations/investigations and memos of discussions with people involved in planning, finance, and development together with a range of local residents and end-users. Such a Grounded Theory investigation of MURP would help to capture fine-grained institutional and site-specific regeneration issues.

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Appendix

King's Cross

The original name for King's Cross was Broad Ford Bridge, which was later corrupted to Battlebridge, named after a bridge that crossed the River Fleet. Although there has been a tradition that the area was originally named after a battle between Boudica and the Romans in AD 60 or 61, this is no longer supported by most historians (BHO, p 273-279).

In AD 597, a mission of Roman monks converted Britain to Christianity. They landed in Essex carrying relics of St Pancras, a boy martyr and patron saint of children. One of the first daughter churches of the mission was built where St Pancras old church is today, which makes the site one of the oldest Christian places of worship in Europe. People were visiting the baths and fountains of the River Fleet for their health until 1756, when the new road (Euston Road) cut across the rural scene (Kingscross.co.uk, 2016).

Battle Bridge, (Source: Samuel Scott, c. 1750)

The building of the Regent's Canal, completed in 1820, helped connect King's Cross with the industrial bases of the north. The area was also attracting industries of its own, such as the Imperial Gas Light and Coke Company,

which opened Pancras Gasworks on the south bank of the canal in 1824 – and there were further additions of companies that manufactured paint or processed waste, all of which made the area quite polluted, particularly in Battle Bridge itself. Coal was brought via the canal to fuel these industrial plants (Kingscross.co.uk, 2016)

A controversial statue to George IV gave the area its current name. Built atop a notoriously ugly sixty-foot pillar, constructed in 1830, the statue was placed at the junction of three major roads, which became known as "the King's crossroads". The unpopular pillar itself was demolished fifteen years later, although the name stuck and was given to the nearby northern railway terminus designed by Lewis Cubitt and completed in 1852: King's Cross station. Other projects followed – such as the neo-gothic Midland Grand Hotel in 1877 – but with the decline of the railways, the area went suffered. It was no longer a great industrial distribution centre and many of its buildings fell into dereliction or underuse. This in turn meant that the local community lost employment opportunities, and they began to move away or face a local job scarcity (Kingscross.co.uk, 2016).

A number of projects attempted to improve the area, such as Camley Street Natural Park, a community wildlife reserve established in the 1980s just to the west of the Regent's Canal. In the latter part of the 1990s, King's Cross became known for its vibrant nightlife and became something of a hub for artists and creative organisations. However, problems of crime, unemployment and a poor quality environment continued to undermine the area (Kingscross.co.uk, 2016).

Queen Elizabeth Olympic Park

The Romans originally settled the Stratford area. Historically an area of marshland and farmland along the spine of the River Lea and its subsidiary channels, from the Middle Ages it became host to a Cistercian abbey, which for centuries became the main landowner in the area. The area was also highly industrialised, from the early days of medieval mills through to providing a base for infrastructure after the industrial revolution – starting with the waterways, but later becoming a key location for the development of the

railways. Labour for all this was provided by workers who lived in back-to-back terraced houses. The area was intensively bombed in the Second World War, after which it saw a change in focus – less residential and more commercial, which underwent a subsequent decline in the density and type of employment (Interview, 2014). Towards the end of the twentieth century, the area had become one of the most deprived in the UK, and therefore was seen as a prime location for regeneration plans. Planners aimed to stimulate change and improve the area as a whole, while also attempting significant new developments that could help accommodate London's increasing population and economy.

Nine Elms

The Romans first settled in Nine Elms as far back as AD47, with evidence of Roman occupation in what is now Lambeth Palace at a time when the surrounding area was mostly marchland (nineelmslondon.com, 2016).

The history of Nine Elms dates back to AD47, with evidence of Roman occupation in the grounds of the current Lambeth Palace at a time when the area's main characteristics were those of marshland. These marshes were drained in the fifteenth century, with the creation of the Heathwall sewer, which enabled the newly arable land to be used as a market garden area to serve the rest of the city. The area gained its name in the mid seventeenth century after a row of elm trees bordering a local lane. (Nineelmslondon.com, 2017). Around the same time (1660) the Vauxhall Pleasure Gardens were constructed, which for two centuries remained one of the most popular leisure and entertainment venues in the whole of London. (Nineelmslondon.com, 2017). The arrival of a new railway hub at Nine Elms however triggered the Gardens' demise, and they were closed in 1859. (Wandsworth.gov.uk, 2016).

A new bridge was constructed in 1816 to create a new route between north and south London. Originally known as Regent Bridge, its name was later changed to Vauxhall Bridge. Vauxhall Cross thus formed the junction of five roads, and became something of an industrial hub. By 1860, the village of Nine Elms had

been subsumed into the town of Lambeth, and the famous Pleasure Gardens had been flattened to make way for new housing.

In the twentieth century, the railways also began to decline, and the terminus at Nine Elms, which had been damaged during the blitz, was demolished in 1948. In 1974, it was replaced by the flower market of New Covent Garden – a reminder of the area's market garden past. Another iconic building of the area is Battersea Power Station, designed by Sir Giles Gilbert Scott and constructed in two parts, initially between 1929 and 1933 (Station A) and then from 1944 to 1955 (Station B). Fully completed, its capacity of 509 megawatts enabled it to provide fully 20% of London's electricity. (Nineelmslondon.com, 2017).

Vauxhall Gardens, (source: Nineelmslondon.com, 2017)

A General Prospect of Vauxhall Gardens from the west, with the proprietor's house and the Prince's Pavilion (with three shuttered windows) in the foreground. (Vauxhallgardens.com)

Because of its convenient proximity to the Houses of Parliament, which are an easy stroll across Vauxhall Bridge, Vauxhall has long been a popular

residential location for MPs and civil servants alike. Other famous locations include Bonnington Square, which was occupied by squatters during the 1970s, creating a community whose legacy is still evident today in the Square's use as the home of housing cooperatives, a community café, and a local delicatessen. There is a particularly sizable Portuguese community in Vauxhall, especially from the island of Madeira, to the extent that there are many Portuguese cafes and bars along the South Lambeth Road. Vauxhall has also become a vibrant hub for London's gay community, many of whom flock to the area to socialise, particularly at weekends. (Nineelmslondon.com, 2017).